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# COMBAT DEVELOPM PROJECT REPORT

FINAL REPORT

CMLCD 58-7

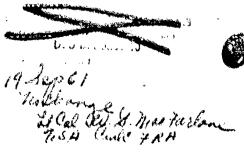
PHASE I

PART A

REQUIREMENTS FOR CHEMICAL CORPS STAFF PERSONNEL AT DIVISION, CORPS, AND FIELD ARMY LEVELS AND AT LOGISTICAL AND MICSILE COMMANDS (U)

June 1960

THIS REPORT REPRESENTS ONLY THE VIEWS OF THE CHEF CHEMICAL OFFICER AND DOES NOT RECESSARILY REPRESENT THE OFFICER OF APPROVAL.
OF THE COMMANDING GENERAL, U. S. CONTINENTAL ASMY COMMAND, OR OF THE DEPARTMENT OF THE ARMY.





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June 1960

Prepared by:

U. S. ARM CHENICAL COMPS FIELD REQUIREMENTS AGENCY Fort McClotten, Alabama

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### SUMMARY (U)

(I) Phase I, Fort A, "Requirements for Chamcel Corp. Stoff—
sion, turps. and Army Lawels and at Logistics! and Missile Commands (U)," is
one of several parts of Combat Development Study Project CMLCD 56-7, "Impact
of CRR Contations on Requirements for Chamical Corps Personnel and Units (U)."
The study project has been divided into the following phases and parts which
will be forwarded separately:

#### Phase I - Permonnol

- Yare A Requirements for Chemical Corps Staff Parasanal at Division, Corps, and Army Lavels and at Lagistical and Missile Communes (0)
- Part C = La deliminants for OFE-Trained Firson al in Hon-Chemical Small Units (U) (Completed)

### Phase Il - Units

- Part A Requirements for Chemical Coops built in the Army in the Field (U)
- (U) Phase I, fart A, replaces the Combet Dayslopment Troject Report CHALT 59-7. "Logact of ABR C existing on Requirements for Chesical Cosps. "I served and Units (U)." prepared by the U. S. Army Chesical Cosps Tiple Requirements (Sency and distributed 10 July 1958. Part A non-been variable and incorporate Cortain modifications so a result of developments gines July 1958.
- (0) This report, Part A of Phase I, recommends that the chemical sections of the commands cristicate he increment to provide vious chemical sections of the commands cristical heatings expetitity. In equition to the chemical sections at division, corps, and field say levels, this report considers and recommends the recognization of the chemical and recommends. This report also recommends that the current collular term, "IA," Redictopical lenter, he redesignment a chemical, Decisions, and Sedictopical Transact that the dependent to include chemical and biological imactions.

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SUBJECT: Requirements for Chemical Corps Staff Personnel at Division, Corps, and Army Levels and at Logistical and Missile Commands (U)

## 1. (U) STATEMENT OF THE PROBLEM:

To determine the minimum essential Chemical Corps staff representation at various command echelons within the Army in the field (i.e., division, corps, and army levels and legistical and missile commands) for the current through mid-range time frames.

## 2. (U) ASSUMPTIONS:

- a. CBR warfare is probable in either limited or general wars in the time frames under consideration.
  - b. The first few days of any future conflict may be decisive.
- c. Friendly and enemy forces have the capability of employing chemical, biological, and nuclear weapons now and in future wars.
- d. Chemical sections at appropriate levels of summand within the  $\frac{21}{4}$  army in the field will be staffed on the basis of CBN operational readiness.
- e. The Chemical Officer will have special staff responsibility for the prediction of radiological fallout resulting from the employment of friendly and enemy nuclear weapons.
- f. Automatic Data Processing Systems (ADPS) will be available by 1963.

### 3. (M) FACTS BEARING ON THE PROBLEM:

- a. (9) There is an increasing avareness of and concern over the limited capability of the Army in the field to cope with the problems inherent in CBN warfare. (References 51, 56, 71, 86, and 88 in Annax C are cited.)
- b. (U) The procedures for monitoring and reporting radioactive  $\frac{65}{2}$  fallout are presented in DA TC 101-1, 9 December 1973.
- c. (U) There will be insufficient time to prepare for CBK varfare after the initiation of armed conflict.
- d. (U) The capabilities of the chemical sections at the various levels within the tray in the field to fulfill their responsibilities under CEADET

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CBR conditions have not been determined in modern warfare.

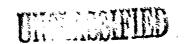
## 4. (5) DISCUSSION:

## a. (S) General.

- (1) In order to arrive at a reasonable solution to the problow stated in paragraph 1, it has been found necessary to examine the current authorizations of Chemical Corps staff personnel in the commands under consideration; to evaluate the tasks these personnel are expected to perform; and to determine, bised on these analyses, if any changes should be recommended in order to provide the chemical sections of these commands with a CBR operational readiness capability.
- (2) Initially, the assigned scope of this phase of CMLCD 58-7 was limited to a consideration of the chanical sections at division, corps, and army levels. In developing the study, however, it appeared desirable to broaden the scope to include the chemical sections of logistical and missile commands. The CDR problems of these commands are similar to those within the elements of the field army enumerated above, and the assumptions, facts bearing on the problem, and discussion are also pertinent to those commands.
- (3) The same reasoning that has led to reorganization of Army units to cope with the threat of nuclear warfare when applied to the threat of CBR varfare leads inescapably to the conclusion that US armed forces must be prepared for coulst in a CBR environment.

## b. (U) Duties of the Chemical Offices:

(1) At division and higher scholans, a Chemical Officer is provided on the staff of the commander for the purpose of advising and assisting him on all matters relating to offensive and defensive chemical, biological, and radiological carfare, to include protection. With the sevent of nuclear verpone and attendent radiological hardeds associated with their use and the discovery of new and highly toxic chamical and biological agents, the duties and tasks of the Chemical Officer have increased many-fold. The duties of the Chemical Officer are listed in detail in Appendix 1 to Annex A. They generally obtain regardless of the level of the bradquarters; however, there will be variances in the appendix of time and effort expended on the tasks





pertaining to those responsibilities at different command echelons.

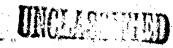
- (2) Phase I, Part S of this study project, "Requirements for T1/CBR-Trained Personnel in Non-Chemical Small Units (U)," forwarded to USCONARC 16 Pebruary 1959, contains recommendations for Chemical Corps and CDR-trained personnel in units below division level.
  - c. (67 Organization and Sunations of the Chamical Section.
- of any level are predicated on the duties, responsibilities, and activities evolving on the Chemical Officer concerned (Appendix I to Annex A). It follows that if the duties and responsibilities charged to the Chemical Officer are valid, he must have the means to discharge his tucks. The means of he provided is a stuff section to organized, trained, and manned that it can translate the Chemical Officer's many responsibilities into appropriate concurrent actions.
  - (3) In communication desirant doubtine, the Charlest Officer 81/ must conduct his operations from a number of physical locations. Consequently, his stuff section must be so organised that it can be divided into the number of segments required by the command's pulley or SCP. At a window, those elements must operate in three lengthons: The trubical operations conter; the administrative or logistical operations scatter; and the charlest stuff section, normally length at the command post.
  - (a) In tactical summands the staff artivities associated with current factical and factical support operations are conducted in the factical operations center to concerned with implementing the plane, producting failout from nuclear artibes, predicting the cancelty-producing affectiveness and the degree of baserd of chesical and biological agents, unintaining the CBR elevation map, discominating the factorisation, controlling and coordinating the serveys, analyzing targets for chemical and biological attack, and sintle current activities. Index current and proposed concepts, this closust is called the Chemical, Biological, and Radiological Element (CBR) of the

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- \* Inctical Operations Concers of Field Army (FATOC), Corps (CTOC), and Independent Corps (16100), and the CARE of the division operations complex. However, as an element of the chemical section, it can perform its mission whether or not there is a TOC or ADSOC or some other operations complex. It is essentially a CBR team trained specifically for these functions.
  - (b) The chemical logistical functions are conducted in the command's administrative or logistical operations center when one is established. The chamical element here is concerned with maintaining current aretus of Chamical Cores supplies, munitions, and equipment of assigned and attached units, providing technical supervision of maintenance and repair of Chamical Corps items of equipment, field filling of Chamical Corps municions, and field impregnation of clarking, supporting area dasage control and assessment activities; and similar logistical activities.
  - of the command, Cat planning activities, the preparation of CRR enneme to operations and administrative orders, technical intelligence autivities, CRR training, and other miscullaneous and administrative activities are performed in that element of the command post where their coordination can best be effected. Consistent with the 562 or the commander's policy, these activities normally will be consucted in the chemical staff section at the main command post. The Chemical Officer nominally operates from this command post, withough he locates bisself wherever he can best influence the CRI operations of the command.
  - (3) The ability of currently authorized charical sections to function effectively under nuclear and CR conditions has not, of course, been tested in actual emphat. However, the results of troop tests, namewers, and command post exercises indicate that charical sourcions under simulated combat conditions are not adequately organized and named to cope with the problems inherent in nuclear and CRR variance. (References 12, 18, 21, 25, 56, and 86 in annex C, are cited.)
    - (4) The workload of chemical sections at the various cabalons,



summarized in subparagraph (2) above, is discussed in detail in Annex A.

Considering the workload of the chemical section operating in several locations and the small number of personnel currently authorized to accomplish the tasks, an increased strength authorization is indicated. Table 1 depicts graphically the current strength authorizations of the chemical sections of the commands under consideration and the personnel considered the minimum essential to provide these chemical sections with an acceptable CDR operational readiness capability.

TABLE 1
CURRENT AND PROPOSED STRENGTH AUTHORIZATIONS FOR CHEMICAL SECTIONS

CHEHICAL SECTION OF:	CURRENTLY AUTHORIZED		Minimu <del>!</del> Essential		INCREASE/DECREASE REQUIRED		
	OFF	WO	RM.	OFF	10 EM	OFF W	O EM
PIELD ARMY							
(TOE 51-1C)	7	2	16	12	1 26	<b>₽5</b> →	1 +10
NDEPENDENT CORPS	1						وواريها ميبيل والأسبطية
(TOE 52-10 and CH 2)	3		5	7	16	+4	+11
CORPS	1					1	
(TOE 52-10 and CH2	2		.3	6	14	+4	+11
MYASTRY DIVISION							
(TOE 7-20)	3		8	4	12	+1	+4
MINORED DIVISION	Τ.	-		,	• • •		
(TOR 17-2D)	1		8.	4	15	+1	-+4
LIGHORNE DIVISION	7					!	,
(TOE 57-60	2		4	4	12	+2	48
LOGISTICAL COMD A							
(TOE 54-IR)	11	Ì	2	4	9	+3 -	1 +7
LOGISTICAL COMP 3	7					1	
(TOE 54-101R)	13	1	4	6	12	<u> +3 -</u>	1 +6
LOGISTICAL COMP.C	7			1			
(YOR 54-201E)	13	1	<u> </u>	7_	14	** 18	1 +10
alssilk com, lt.	7	~				1	
(foe 19-52f)	*		*	3	14	*	
HISKILE COM. HED.							
(TOL 32-42T)	11_	-	Q.	5	14	46	+5
CISSILE COID, HVY						1	•
(TOR 39-72T)	*		ŧ	_ 4	10		

(5) The Licrosess proposed in Table 1 are susters and are considered the minimum essential for providing the chemical sections of the commands under consideration with an acceptable operational readiness capability. The proposed strength authorizations of the chemical sections do, however, provide the Chemical Officers of the communds indicated with an improved capability and a flexibility not possible under current tables of

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organization. The Chamical Officer will be able to divide his section contact the faction, logisatical, administrative, and planning functions can be performed in the appropriate locations. Ly ensuring that the personnel of the section are capable of performing each other's tasks, he may shift personnel temperatily from one activity to another that needs sugmentation.

Such shifting, however, must be considered a temperary solution only, since the primary tasks on the personnel shifted would be reduced or suspended.

## d. ( Accordance and Replacement Considerations.

- (1. The reorganization of the charical rections proposed in subparagraph a chora to designed primarily to provide a CDR operational readinance capability to the charical rections of the commands under consideration. In the event of alt-out or sustained the amount business of the increase proposed, in all likelihood, would not be deflicient to cope with a saturation. If such expendical and description. In view of percental calling limitations for the effect and expected to obtain for the time fraces under consideration, it appears appropriate to describe a method of supersting there are required.
- (a) Anguenting the observed staff with parameted from the charact sections of altracted or suggests units of the command to a parametric solution. Morever, this wast be considered a temporary expedient only, winto, in a succeived first or pariety office, the chartest solutions succeived of the contact within the content furnishing the augmentation will be described with the same problems.
- (b) Of "ting personner from the Charlest company, Combat Supports, or any elector of this company apport may be accepted on in support of the command concerned, is exactly resultable. Concerned, these evolutions also will probably be fully— if not over-producted in currying our that princes affects, business elements of charlest combat support units will be for in a content of charlest of charlest combat support units will be compared to the company affects of the Charlest company, Combat Support, to carry our its confident missions is exceeded, Combat Support, to carry our its confident missions is exceeded being command in these XI, Part A. of Carry of the capture of the confidence of command the three XI, Part A. of Carry of the capture of the

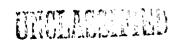
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- (c) You ying replacements or anguentation from units within the command to good blo but not considered practicable. In addition to
  the understandant conditions of unit commanders to a lawy, the lack of techmical training and unfamiliarity with staff procedures of such personnel
  would make them or questionable value until properly trained.
- (a) Obtaining authorization to sugment the strength of the chesical space space, so required, and requisitioning qualified personnel through normal teptacement channels appears to be the most feasible acthod of acquiring sugmentation by applicing casuaities to chesical acctions.
- L. Replacement or augmentation of the CRRE in the operations center of the command conserned is considered the most vital requirement, since its task, are assential in the conduct of the immediate factions operation. In a sustained CRR or nuclear situation, this element of a charical section would be west assentials to everload or breskdown.
- Conter by change I to TOE 3-1000, consists of I officer and 4 enlicted man and descriptly can provide the undiclogical center capability to any of the community can provide the undiclogical center capability to any of the community under consideration. By expanding the missing of this term to be close checked and biological considerations and radesignating to a Charlest, Michaelest, and Sadiological Term (CONT), the cause than becomes a convenient mattaler unit for use at the CRRS in any command where required. It could be requested as a unit wither to replace or augment the CRRS (or conjurable description at any level.
- (2) Comming their property contract performant to quantities likely to be required and property positioned the the replanetage upstace is a major problem and is beyond the ecope of this study. This problem is correctly with consideration in eaction study.

## i. Hi grandina.

there of the comments under consideration in order to provide these engageds



characted describes with acceptable CiR operational readiness capabilities.

It is concluded that the chemical extraors of the following commands chould expect only 1 at a concluse parameted except to redicated pending a more accusate terms between each of the contract of the contract

- (2) Interstry, Armoret and Administrations, each: 4 officers; 12 ontains them.
  - (2) Grande Corpu. I will was 19 unlisted men.
  - ( ) Independent Corporation 7 officers; 16 enlisted men.
  - (4) Thete dray: The fifthenes; I wanted efficer; I6 millioted

man.

- (5) A. Mushout dominand A: A officers; 9 enlisted men.
- (5) Ligistical Cormeré B: 6 officers; 12 enlisted men.
- (7) Togistical Command ): 7 officers; 14 enlisted men.
- (9) Priestive Courard, Light and Medium, pert; 5 officers; 14 epiisted man.
  - (9) educatio Commant, Heavy: 4 officers; 10 enlisted men.
- b. (W) There is a requirement for the capabilities of the team, now matherized and trained to operate as a radiological center in operations completes at various command problet, to be increased to include chemical and biological combat support operations. It is concluded that the unleaden of the callular unit, "IA," Radiological Center, should be expended to include chemical and biological operational functions and that the team should be redesignated a Chemical, Biological, and Radiological Team (CERT).
- e. (U) There is a requirement for testing the validity of the above conclusions in war genes, command post charcises, and field training exercises.

#### 6. (A) RECOMMENDATIONS:

a. 19 That Handquarters UECONARC initiate action leading to the carry our gaming and field testing of the proposed reorganized chemical sactions of the infantry, armoved, and airborne divisions; the organic and in-dependent corps; the field army; the logistical commands; and the missile





commands.

- b. (C) That Meadquarters USCONARC initiate action for changing the Tables of Organization and Equipment of the following commands to authorize their chemical sections the personnel strengths indicated pending a more accurate determination by actual field testing.
- (1) Infantry, Armored, and Airborne Divisions, each: 4 officers: 12 enlisted men.
  - (2) Corps: 6 officers; 14 enlisted men.
  - (3) Independent Corps: 7 officers; 16 enlisted men.
- (4) Field Army: 12 officers; 1 warrant officer; 26 enlisted men.
  - (5) Logistical Command A: 4 officers; 9 enlisted men.
  - (6) Logistical Command B: 6 officers; 12 enlisted men.
  - (7) Logistical Command C: 7 officers; 14 enlisted men.
- (8) Missile Commands, Light and Medium, each: 5 officers; 14 collisted men.
  - (9) Missile Command, Heavy: 4 officers; 10 enlisted men.
- c. (U) That Headquarters USCONARC initiate action to cause the mission of the cellular team, "LA," Radiological Center to be restated to include chemical and biological functions and to redesignate this unit a Chemical, Biological, and Radiological Team.

## ANNEX A

ANALYSIS OF THE CHEMICAL SECTIONS OF DIVISION, CORPS, FIELD ARMY, LOGISTICAL COMMANDS, AND MISSTLE COMMANDS (U)

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## ANNEW A

ANALYSIS OF THE CHEMICAL SECTIONS OF DIVISION, CORPS, FIELD ARMY,
LOGISTICAL COMMANDS, AND MISSILE COMMANDS (U)

1-(3) INTRODUCTION.

- a. 487 The results of CBR proficiency tests, reports from field 56/ 12/18/25 commanders, and critiques of field training and command post exercises indicate that U. S. armed forces have a significantly limited capability to engage in, or defend against, CBR warfare. This fact, coupled with the known 33/35/83 capabilities and stated intentions of the Sowiet Union, requires that the CBR operational readiness of U. S. armed forces be strengthened.
- b. (U) Reorganizing the chemical sections of the various commands within the Army in the field will not in itself provide a GBR operational madiness capability to these forces. A properly organized and adequately manned chemical staff section will, however, provide the commander with a tool which he can use to assist materially in strengthening this capability.
  - c. (3) The purpose of this Annex is:
    - (1) To review the responsibilities of the Chamical Officer.
- (2) To examine the organization and functions of the chamical sections of the infantry, erwored, and airborne divisions, the organic corps of the type field army, and the independent corps; the type field army; the logistical commands; and the missale commands.
- (3) To determine if these chemical sections are properly organized and adequately staffed to perform their functions.
- (4) To propose appropriate changes to the chanical sections of these commands, if required.

### 2. (II) DISCUSSION.

- A. (U) Responsibilities of the Chemical Officer,
- (1) A chemical staff officer is provided at division and higher echalges of command to advise and easiet the commander and his staff on all matters relating to offensive and defensive chemical, biological, and radiological (GME) variers. With the advent of nuclear weapons and the attackent vadiological hazards associated with their use and the discovery of new and

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highly toxic chemical and biological agents, the responsibilities and tasks of the Chemical Officer have increased many-fold.

- (2) Appendix 1 to this Annex lists the responsibilities and typical staff activities of the Chemical Officer. These are applicable at any level; however, certain responsibilities may require more emphasis at one command level than at others. For example, a division Chemical Officer will not be as concerned with long range plans as an army Chemical Officer.
  - b. (U) Functions of the Chemical Section.

from the responsibilities of the Chemical Officer discussed in paragraph 2a above and in Appendix 1 to this Annex. Typical tasks or duties are listed under these functions to indicate the type of work required of personnel in the chemical sections. The work requirements of these functions will vary in accordance with the mission and achelon of each command. However, the fact that coordination with appropriate staff agencies is a typical task for each of the functions is not specifically mentioned. It is, of course, a continuing requirement and should be considered in evaluating the workload of a chemical section.

- (1) Planning and Operational Functions.
- (a) Plans and coordinates the use of C and B agents, weapons, and munitions in offensive operations. Typical tasks generated by this function include:
  - l. Analyzing targets.
- 2. Determining and recommending the type, quantity, and means of disseminating the agent/weapon/munition.
  - 1. Determining troop safety requirements.
- 4. Continuous monitoring of meteorological reports and vertices of plans as result of changing meteorological conditions.
  - 5. Retimating decontamination requirements.
- (b) Prepares CBR Defense Plans. Typical tasks generated by this function include:

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- 1. Evaluating known enemy capabilities to launch CBR attacks.
- 2. Terrain analysis to determine likely areas for CBR attack.
- 3. Continuous monitoring of meteorological data to determine when conditions favor the enemy's launching an attack.
- 4. Preparing SOPs and other instructions to the command and reviewing unit SOPs.
- 5. Preparing GBR annexes to operations and administrative plans.
- 6. Assisting command in inspecting, repairing, and procuring individual and collective protection equipment.
  - 7. Preparing decontamination plans.
- (c) Assists in planning chemical participation in barrier and denial operations when CSR activities are involved. Typical tasks generated by this function include:
- 1. Determining and recommending type, quantities, and positioning of agents/munitions/mines.
  - 2. Troop safety requirements.
- 2. Continuous monitoring of meteorological data and revision of plan if meteorological conditions so indicate.
- 4. Technical supervision of emplacement of chemical agents/munitions/mines.
  - 5. Decontamination requirements.
- (d) Prepares and supervises training programs of Chemical Corps units under the operational control of the chemical officer, and providing technical supervision of CBR training throughout the commend. Typical basis generated by this function include:
- Making estimates of the CBR training mituation of the command.
  - 2. Delermining status of training of attached or



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assigned Chemical Corps units.

- 3. Preparing and supervising training programs to ensure operational readiness of Chemical Corps units.
- 4. Freparing CBR training programs and providing technical supervision of CBR training of the command.
- 5. Supervising operation of CBR schools for the command.
- (c) Plans and recommends requirements for and employment of Chemical Corps troops organic or attached to the command. Typical tasks generated by this function include:
- 1. Determining and recommending the number and types of Chamical Corps troops to be included in the troop list for a given operation.
- 2. Determining adequacy of support capability of available Chemical Corps troops.
- 3. Requesting additional Chemical Corps troops or personnel as required.
- 4. Shifting available Chamical Corps support units to critical areas as required.
- (f) Maintains the CBR situation map(s). Typical tasks generated by this function include:
  - 1. Posting current tactical situation.
  - 2. Posting current and planned Chit operations.
  - 3. Posting mateurological data.
- 4. Indicating contaminated areas and estimating when souteninstics will decay to tactically insignificant level.
  - 5. Hainteining status of decontemination operations.
- (g) Disseminates CBR contamination information as required.

  Typical tasks generated by this function include:
- 1. Preparing and disseminating periodic charts showing extent and degree of contemination of conteminated areas within the conmander's area of interest.



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- 2. Freparing and disseminating pre-strike predictions of areas expected to be contaminated by radiological fallout or CBR contamination.
- 3. Freparing and disseminating technical decontamination instructions.
- (h) Provides technical supervision of the following operations (typical tasks generated by these functions are listed below each of the functions):
- 1. Monitoring of CBR contaminated areas and decontamination of these areas.
- \_\_\_\_\_ Receives and posts information which contributes to the build-up of CBR situation.
- b. Determines whether CBR surveys should be initiated as a result of monitoring information received.
- c. Provides technical assistance for decontami-
- 2. Employment of chemical (toxics, smoke, flame, and incendiaries) and biological agents in tactical operations.
- a. Recommends the type, quantity, and means of disseminating chemical and biological agents.
- b. Advises time of employment based on agent of choice and meteorological conditions.
  - 3. Planning and coordination of CBR surveys.
- a. Defines limits and recommends assignment of sections to specific units; briefs survey parties.
- b. Directs survey operations when primary method is employed.
  - C. Receives survey reports and collates data.
  - d. Prepares and publishes contamination infor-

mation.

4. Prediction of fallout from nuclear vessions.



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a. Prepares target analysis and damage assessment predictions for all friendly nuclear bursts.

b. Prepares target analysis predictions for possible enemy nuclear bursts.

c. Prepares damage assessment predictions on all nuclear shots within the commander's area of interest.

d. Monitors meteorological data and amends predictions as required.

5. Prediction of CBR-casualty producing effectiveness and degree of risk of chemical agents.

e. Predicts effects planned CNR attacks will have on enemy and delineates probable areasof contamination.

b. Prescribes troop safety requirements.

c. Advises commander and interested staff officers when mateorological conditions favor enemy employment of CBR attack.

d. Makes damage assessment predictions to define areas and degree of contamination and advises on decontamination procedures.

6. Planning the employment of ficas throwers and flame field expedients.

A. Trains flowe thrower operators as required.

b. Advises and supervises the use of finis field

expedients.

C. Advises on capabilities and limitations of fines throvers.

### (2) Intelligance Functions.

(a) Provides technical supervision of CRR intelligence activities within the command. Typical tasks generated by this function include:

1. Recormending REI to G2.

2. Assisting C2, as required, in the collection and evaluation of intelligence information pertaining to CEE werfare.

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- 3. Advising, through G2, subordinate intelligence sections on CBR intelligence aspects.
- 4. Supervising operations of assigned or attached Chemical Corps Technical Intelligence Detachments.
- 5. Assisting G2 in estimating enemy CBR capabilities based on information collected and material captured.
  - 6. Evaluating enemy protective equipment.
- (b) Provides technical supervision of the examination and processing of captured enemy CBR material. Typical tasks generated by this function include:
- 1. Examining captured enemy CBR material and determining proper disposition.
- 2. Instructing command on procedures to be followed when enemy CDE material is captured.
  - (3) Logistical Functions.
- (a) Made technical supervision of the following CBR logistical operations (typical tasks generated by these activities are listed below each of the operations):
  - 2. The determination of requirements for, and the requirements, procurement, distribution, storage, and documentation of Chemical Corre supplies, municions, and equipment.
  - e. Determines quantities of CBR agents, munitions, or material required for specified operations and sommand reserves.
  - b. Recommende changes to Tebles of Allowance for CHR items as appropriate.
  - g. Besures timely requisition of Chemical Corps tupplies and equipment.
  - g. Recommende distribution of tritical and controlled items of Chemical Corps equipment.
  - g. Recommends percentage and type absolute numbers on Class V basis load.

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£. Provides technical inspection of the storage of Chemical Corps munitions and items of equipment.

g. Recommends location of chemical supply points and depots.

h. Issues instructions for proper documentation of Chemical Corps supplies and equipment.

items.

2. Maintenance and repair of Chemical Corps equipment and supplies, field impregnation, field filling of Chemical Corps munitions, and servicing of fluxe throwers.

a. Provides inspection and repair teams to assist units in maintenance and repair of Chemical Corps items of equipment.

b. Arranges for field impregnation of clothing and equipment as required.

c. Arranges for field filling of Chamical Corps

d. Arranges for servicing and charging of flame

throvers.

3. Recovery, evacuation, maintenance, and reclamation of Chemical Corps material beyond the capabilities of using units.

a. Issues instructions for recovery and evaluation procedures of Chemical Corps material.

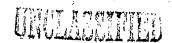
b. Arranges for maintenance and reclamation of Chemical Corps materiel beyond the capability of using units.

(b) Maintains status of Chamical Corps items within the command and supervises equipment status reporting system. Typical tasks gracerated by this function include:

i, Spot checking and compolitating reports from sub-

2. Determining reasons for excessive or critical





deadline of Chemical Corps items.

- 2. Recommending appropriate action to reduce deadline and arranging for assistance where required.
- 4. Initiating command action to adjust reported overages, or shortages, to TOE/TA authorizations.
  - (4) Administrative Functions.
- (a) Ensures that personnel of the chemical section are trained to perform the duties of other members of the section. Typical tasks generated by this requirement include:
- 1. Training personnal not normally essigned to the CBRE in CBRE operations.
- 2. Training personnel not normally easigned to the logistical element in logistical duties.
- (b) Shifts personnel from one element of the chemical section to emother as required. Typical tasks generated by this requirement include:
- 1. Augmenting the CRRE with personnel from the chemical section when round-the-clock operations are required.
- 2. Providing a Chin depolitity to ADSOL or resulting about the chemical mention when required.
- (c) Determines requirements for Chemical Corps personnel for the command and requests replacements or sugmentation. Typical ranks generated by this entitity include:
- L. Maintaining status of Chamical Corps personnel within the command.
- 2. Evaluating requirements for Charlesi Curps per-
- J. Preparing requests for replacements or governmentalist of Charles Corps personnel and units within the communi.
- Curps personnel.
  - (d) Propares and for wide technical data and reports.

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Typical tasks generated by this activity include:

- 1. Directing accomplishment of necessary investigations; compiling data; preparing analyses and making estimates.
- 2. Preparing and forwarding technical reports through technical channels.
  - 3. Preparing chemical portion of historical reports.
  - c. (C) Analysis of the Division Chemicel Sections:
- (1) TOE 9 7-2D and 17-2D authorize the chemical sections of the infantry and armored divisions a strength of 3 officers and 8 enlisted men, each. These TOEs increased the ROCID and ROCAD chemical sections by 69/1 officer and 4 enlisted men to provide each division a radiological center.
- (2) TOE 57-6D establishes in the dirborne division a chemical section of 2 officers and 4 enlisted man. The pravious TOE authorized only a Chamical Corps officer in the G3 section and 2 enlisted specialists in the airborne support group.
- (3) The increased strengths authorized the division chemical sections by these draft Tota indicates recognition of the increased responsibility of the chemical officers in the employment of nuclear vaspons. Have ever, the currently authorized strengths of the division chapital sections do not yet provide the commanders with chemical sections capable of faithling the functions expected of them.
- (4) The division chemical section-statistry, armoved, or airborns-some be sufficiently studied so that it can be divided into as forst three elements. Those elements will operate to a minimum of three different locations:
- (a) A Chemical, Miological, and Rediological Element (CLRE) BL/
  Vill be located in the divisions's tactical operations center. Whither or
  not this complex is noticed the DIOC, the G2-C3 operations center, or another
  news is not relevant to this study. A CRE of one offices and 4 calisted man
  to considered assential to accomplish the mission of the CRE.
  - (b) The charinel legistical element will be located in

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the division's logistical control center (or ADSOC, if it is so designated).

A minimum strength of one officer and 3 enlisted men is considered assential to perform the chemical service, supply, and maintenance functions required. The division chemical officer may provide a CBRE capability to the division's logistical control center by shifting personnel from the command post element of his section to the logistical element. Such movement of personnel will reduce the capabilities of the command post element of the chemical section in proportion to the number of personnel used to form or augment the logistical command CBRE. Any deviation of personnel from primary mission assignment to formation of any temporary CBRE as a secondary assignment can at best be only for a short period of time, since it obviously reduces or eliminates primary mission accomplishment as described in subparagraph (c) following.

A temporary CBRE could be formed to support area damage control and assessing ment operations if required.

- (c) The command post element of the chemical section will be located in the division main command post, or in the CP where the planning and coordination necessary for the over-all/operations can best be affected with other staff sections. The division Chemical Officer supervises the division's CRR operations from this location, although he personally locates himself where he can best influence the CBR efforts of the command. It may be necessary for this element to be subdivided if chemical staff representation is required at an alternate or a forward command post. The minimum number of personnel required for performing the planning, operational, intelligence, and administrative functions of this element is 2 officers and 5 enlisted men.
- (5) The recommended strengths, grades, and MOSs of the chemical sections of the three-type divisions--infantry, ermored, and airborne--are shown in Appendix 2 to this Annex. The total number of personnel considered assential for each of the division chemical sections is 4 officers and 12 enliated men. A breakdown of the section into the elements iscussed above is also shown in Appendix 2 to this Annex.
- d. (8) Analysis of the Organic and Independent Corps Chemical Sections.

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- (1) The chamical section of 2 officers and 3 enlisted men, authorized the commander of an organic corps under TOE 52-10 provides him with a significantly limited capability to plan for, engage in, or defend against GRR warfars. These same limitations are evident in an independent corps with its authorized chemical section of 3 officers and 5 enlisted men (TOE 52-10). Neither corps chemical section, as currently authorized, has sufficient personnel to perform the planning, operational, intelligence, logistical, and administrative functions it is expected to perform.
- (2) As in other bradgearters, the corps chemical section will be expected to operate in a minimum of three locations:
- (a) A Chemical, Biological, and Radiological Element (CBRE) will be located in Corps Tactical Operations Center (CTOC, or ICTOC for the independent corps). A minimum of one officer and 4 enlisted men is considered essential for this activity.
- (b) Although the corps is not an administrative command, it has logistical functions to perform for its own corps troops, is involved in logistical planning, controls critical items, and assists subordinate commands with their logistical problems. An element of the chemical section wall be located at Corps Rear or ADSOC to perform the required chemical service, supply, and maintenance functions for the corps. A minimum of 1 officer and 3 enlisted men is considered essential for the logistical element of the organic corps logistical element. For the independent corps, this element should consist of 2 officers and 5 enlisted men because of the expanded logistical functions it will be expected to perform. The corps chemical efficer may provide a CBRE capability to the Corps ADSOC or area damage controller by shifting personnel from the command post element of the chemical section to the ADSOC if required for area damage control and assessment operations.
- (c) The command post element of the chemical section is located in the corps main command post to enable it to effect the planning and coordination necessary for over-all supervision of the corps CBR effort.

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The corps chemical officer mominally is located with this element of his section, herever, he produced his section, herever, he produced his blood where he can influence meat effectively the CR suffert of the command. It may be necessary to subdivide this element if representation from the chemical section is required at an alternate or forward command post. The minimum number of personnel required for performing the plantage, operational, intelligence, and administrative functions of these element is 4 officers and 6 collected men.

- (3) The recommended strength, grade, and MOS of the personnel of the chemical speciers of the organic and independent corps are shown in Appendix 3 to this Assex. The total strength recommended is 6 officers and 14 cultiputations and the organic corps and 7 officers and 16 cultisted men for the independent corps. A breskdown of the section into the almaents discussed above is also shown in Appendix 3.
  - e. (66) Analysis of the Army Chemical Section.
- qualified personnel to insure that its operational, planning, intelligence, logistical, and administrative functions are discharged efficiently and in time to be of use to the commander, the staff, and other headquarters. The current strength of the army chemical section of 7 officers, 2 warrant officers, and 16 enlisted men, authorized TOE 51-10, provides the section with only a marginal capability to perform these functions.
- (2) The army chemical section must be sufficiently flexible so that its operations can be divided into a minimum of three elements, each element operating in a different location. These elements are:
- (CERE) of the Field Army Tactical Operations Center (FATOC). A minimum of one officer and 5 enlisted men is considered essential for this activity at every level.
- (b) The chemical logistical element of the Administrative Support Operations Center (ADSOC). A minimum of 2 officers and 6 eministration men is considered necessary to perform the chemical service, supply, and

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maintenance functions required. The Chemical Officer can provide a CERE capability to the ADSOC or area damage controller when required by shifting personnel from the command post element of the chemical section to the ADSOC. The CERE at ADSOC would be used in support of area damage control and assessment operations.

- (c) The command post chemical element. This element will be located at that command post where over-all supervision of the CER activities and coordination with other staff sections can best be affected. The Army Chemical Officer nominally operates from this location, although he positions himself wherever he can best influence the CER efforts of the command. This element may have to be subdivided for operating in two locations if the commander desires chemical staff representation at a forward or alternate command post. The minimum strength necessary to perform the planning, coordination, operational, intelligence, and administrative functions of this element is 9 officers, one warrant officer, and 15 enlisted men.
- (3) The recommended strength, grades, and MOSo of the personnel of the field army chemical section are shown in Appendix 4 to this Annex.

  The total strength recommended is 12 officers, I various officer, and 26 onlisted men. A breakdown of the section into the several elements discussed above is also shown in Appendix 4.
  - f. (8) Analysis of Lagistical Command Chemical Sections.
    - (1) General.

A logistical command is an administrative support organisation composed of a TOE beadquarters company and such service units as may be
assigned or attached to execute specific administrative support missions. It
may be augmented by teofical units for year ereas summity. There are three
types of logistical command handquarters, types A, B, and C, each designat to
constant and improve an administrative support force of a given size. A
logistical command may be employed as a Therter Army Logistical Command (TAGE),
as an Advance logistical Command (ADLCG), and case Sase Logistical Command.
(BALOG). within a theater communications some. Logistical commands may also

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be utilized to execute specific administrative support missions. For example, the field army or corps may be employed as a task force on an independent mission where the support normally provided by the theater army logistical command will not be present. A separate logistical command is employed when the field army is operating on such an independent mission. (See FM 54-1, July 1959, The Logistical Command.)

- (2) The functions of chemical sections of logistical commands may be categorized as planning, operational, intelligence, logistical, and administrative functions as in the commands already discussed. Although logistical cal commands primarily support combat operations administratively—hence the character of their operations is essentially logistical and not tectical—the chemical sections of these commands must provide the commanders:
- (a) A CBRE capability in the operations center of the logistical command. This element of the chemical section will perform functions smaller to a CERE in the factical operations centers of the other commands discussed in the study. The operational functions of the logistical commands are accomplished in the Administrative Support Operations Centers (ADSOC) instead of in the FATOC, ICTOC, sto.
- (b) A chemical logistical element to perform the chambest survice, supply, and maintenance functions required. This element will be located with elements from other technical service staff sections having similar duties.
- (c) Technical direction and supervision of the over-sil Car operations of the command. This element will be located where it can best accomplish the coordination with other staff soutions necessary to perform the planning, intelligence, operational, and subministrative functions required.
- (3) Logistical Command, Type A. Headquarters, Logistical Command A (TOX 54-18) exercises command of an integrated organization range ing in size from 9,000 to 15,000 troops. When provided with these units, the command can furnish administrative support to a combat force of approximately 30,000 troops. The currently authorized strength of the chamical

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section is one officer, one verrant officer, and one enlisted man. The parsonnel considered the minimum essential for the chemical section of the type A logistical command are 4 officers and 9 enlisted man. Appendix 5 lists the recommended strength, grades, and MOSs of the chemical section personnel of the type A logistical command; this appendix also shows a breakdown of the section into its various functional elements.

- (4) Logistical Command, Type B. Headquarters, Logistical Command B (TOE 54-101R) exercises command of an integrated organization ranging in size from 35,000 to 60,000 troops. When provided with these units, the command can furnish administrative support to a combat force of approximately 100,000 troops. The currently authorized strength of the chemical section is I officers, one varrant officer, and 4 enlisted men. Four officers and 12 whilsted men is considered the minimum personnel strength essential for the chemical section of the type B logistical command. Appendix 6 lists the recommended strength, grades, and MOSs of the chemical section of the type B logistical command, this appendix also shows a breakdown of the section into its various functional elements.
- (5) Logistical Command, Type C. Meadquarters, Logistical Command C (TOE 54-2018) exercises command of an integrated organization ranging in size from 75,000 to 100,000 troops. When provided with those units, the command can furnish administrative support to a U. S. Field Army or an attical army group. The personnel strength of the currently authorized chemical section is 3 officers, one variant officer, and 4 emlisted wen. A personnel strength of 7 officers and 14 emlisted wen is considered the minimum essential to the successful functioning of the chemical section of the type C logistical command. The recommended strength, grades, and MOSs of the personnel of the chemical section of the type C logistical command are shown in Appendix 7, a breakdown of the section into its functional elements is also shown in Appendix 7.
  - g. (C) Analysis of Missile Command Chemical Sections.
    - (1) General.



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- (a) U. S. Army Missile Commands (Light, Madium, and Heavy) contain basic fire units and sufficient combat and service supporting units to enable these commands to deliver effective missile fire support when deployed independent of normal US Army combat and service support. The missile commands are designed to provide ground delivered nuclear fires against nurface targets and atomic demolition munitions in support of allied ground forces.
- (b) Although the organization and concepts of employment of US Army Missile Commands are currently being studied and evaluated, the chemical staff acctions proposed for the three type missile commands will be valid unless significant changes in the basic concepts of organization and employment are made.
- (c) The functions of the chemical sections of the missite commands are timilar to those of the chemical sections of the other commands already discussed--planning, operations, intelligence, logistics, and administration. Similarly, chemical sections of missite commands are divided into elements for operating in several locations. The chemical section will also provide technical supervision of the operations of the chemical combat support platoon, which is organic to the service and support groups of the missite commands.
- Medium. Under current organizational concepts, these missile commands each consist of a command bandquarters, 2 field artillery missile groups, and a service and support group. Since these groups may be separated by distances of as much as several hundred miles, a CBRE is required for each group. The proposed chemical section for each of these missile commands is: 2 officers and 2 solisted man at the command headquarters to perform the required planning and technical supervision of the over-all CBR effect of the command; a CPRE of one officer and 6 enlisted man in the operations centers of each of the 2 field artillery missile groups; and a CERE of 1 officer and 4 enlisted wan for the service and support group. The proposed total personnel streageh

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of the chemical sections of the light and medium missile commands is 5 officers and 14 enliated men.

- (3) US Army Missile Command, Heavy. The heavy missile command has one less field artillery missile group than the light and medium missile commands and requires one less CBRE. The proposed chemical section of the heavy missile command is: 2 officers and 2 enlisted men at command head-quarters; and a CBRE of one officer and 4 enlisted men each in the field artillery missile group and in the service and support group. The total personnel strength proposed for the chemical section of the heavy missile command is 4 officers and 10 enlisted men.
- (4) The proposed strengths, grades, and MOSs of the chemical sections of the missile commands are shown in Appendix 8 of this Annex; a breakdown of the sections into functional elements is also shown in Appendix 8.

## 3. (8) SUMMARY.

- a. (S) Changing concepts of combat operations and logistical support, the Soviet capability to wage nuclear and CBR warfare, and the limited capability of US forces to employ and defend against these mass-destruction and mass casualty-producing weapons necessitate a critical evaluation of the chanical sections at the various achelons of command in the Army.
- b. (0) The currently authorized chemical sections of the commands under consideration are not sufficiently staffed to perform the functions required of them. The reorganizations proposed are considered the minimum essential to provide the commands with a staff capability consistent with the assigned functions.
- c. (U) Early and realistic field testing of the proposed reorganized chamical sections is recommended.

#### APPENDIX 1 TO ANNEX A

### RESPONSIBILITIES OF THE CHEMICAL OFFICER

- 1. This Appendix lists the responsibilities and typical staff activities of the Chemical Officer. These are applicable at any level; however, certain responsibilities may require more emphasis at one command level than at others. For example, a division Chemical Officer will not be as concerned with long range plans as an army Chemical Officer.
  - 2. Responsibilities of the Chemical Officer.
- a. Advises the commander and his staff on CBR matters including the planning and coordination of the use of chemical and biological agents, weapons, and munitions in offensive operations.
- b. Supervises the determination of requirements for, and the requisitioning, procurement, distribution, storage, and documentation of, Chamical Corps supplies, munitions, and equipment.
- c. Plans and recommends requirements for, and employment of, Chamical Corps troops.
- d. Prepares and supervises training programs of Chemical Corps units under his operational control, and exercises technical supervision over CBR training throughout the command.
- e. Exercises technical supervision over the following CBR Operations.
- (1) Monitoring of CBR contaminated areas and decontamination of these areas.
- (2) Planning for and use of chemical (toxics, smoke, flame, and incendiaries), and biological agents in tactical operations.
  - (3) Planning and coordination of CBR surveys.
- (4) Maintenance and repair of Chemical Corps equipment and supplies, field impregnation of clothing, and field filling of Chemical Corps munitions.
- (5) Technical inspection of Chemical Corps equipment and supplies, to include organizational maintenance of such aquipment and cupplies.

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- (6) Recovery, evacuation, maintenance, and reclamation of Chemical Corps material Dayond the capabilities of using units.
  - (?) Examination and processing of captured CBR material.
  - (8) Technical intelligence pertaining to CBM warfare.
  - (9) Prediction of fallout from nuclear weapons.
- (10) Prediction of CBR casualty-producing effectiveness and degree of hazard of chemical and biological agents.
- (11) Planning for the use and servicing of flame throwers and flame field expedients.
  - f. Maintains CBR situation maps.
  - g. Disseminates CBR contemination charts as required.
- h. Supervises the equipment status reporting system within his area of responsibility.
- i. Advises the commander and his staff on GRR defense and preparce CRR defense plane.
- j. Assists in planning chemical participation in barrier and denial operations when CBR activities are involved.
  - k. Supervises the operation of C32 schools within the commend.

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## APPENDIX 2 TO ANNEX A

# ROPOSED CHEMICAL SECTION INFANTS: ARMORED AND AIRSORNE DIVISIONS

			<u>-</u>
Designation	MOS	Strength	Grade
Dir Cm1 Q	57314	1	Lt Col
Asst Cri O & CBRE Opns O	57314	ı	Major
0,045 0	57314	2	l Maj, 1 Capt
M/5gt	53460		E-9
CRRE Opns Sgt	53460	ī	E-7
Or. Opns Sgt	53460	<sub>joi</sub> 1	E-7
Arest CBRE Opns Sgt.	53460	1.	E-6
Asst Cm! Opns Sgt	534.60	1	E-6
Cm! Sup Sgt	76160	1	E-6
Computer	53460	1	E-6
Onl Staff Spc			
•	53460	1	E-5
Sr Cull Eq Rpmn	53310	1	E-5
Plotter/Clerk	53460	1.	E-5
Cml Eq Rpmm	53310	1	E-4
Clerk Typist	71110	1	E-4

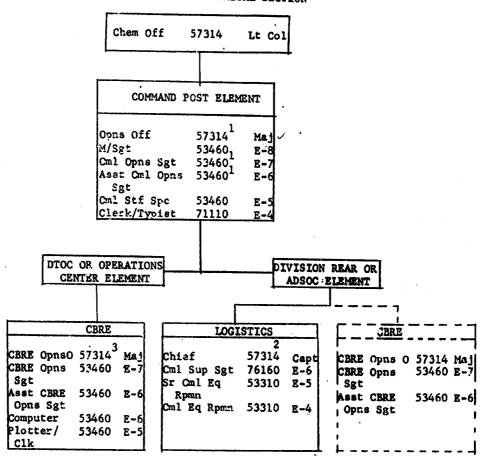
TOTAL 16

Total Personnel: 4 Officers, 12 Enlisted Men.

Appendix 2 to Annex A

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## PROPOSED DIVISION CHEMICAL SECTION



- 1. Will form ADSOC CBRE when necessary.
- 2. Will be the ADSOC Chemical Officer.
- 3. Will be Asst Div CmlO.

## UNCLASSIFIED APPENDIX 3 TO ANNEX A

#### PROPOSED CORPS CHEMICAL SECTION

1. Ouganus County

Designation	MOS	Strength	Crade
Corps Cml O	57314	ı	Col
Asst Cml O & CERE Opns O	57314	1	Lt Col
Opne O	57314	4	l-Lt Col, i-Maj, 2-Capt
M/Sgt	53450	1	E-8
CBRE Opns Sgt	53460	1	E-7
Unil Opas Sgt	53460	1	E-7
Asst CBRE Opns Sgt	53460	1 .	E-6
Asst Cml Opns Sgt	53460	3	2-E6, 1-E5
Cml Sup Sgt	76160	1	E=6
Computer	53460	1	E-6
Col Stf Spc	53460	1	E-5
Sr Cal Eq Rpmn	53310	. <b>1</b> .	E-5
Plotter/Clerk	53460	1	E-5
Cml Eq Rpmn	53310	1	E-4
Clerk Typist	71110	1	R-4
	TOTAL	20	
	IOIAL	<b>40</b>	
2. Independent Corps.	Above plus:		
Opns O	57314	1	. Maj
Cml Sup Sgt	76160	2	E-5

TOTAL 23

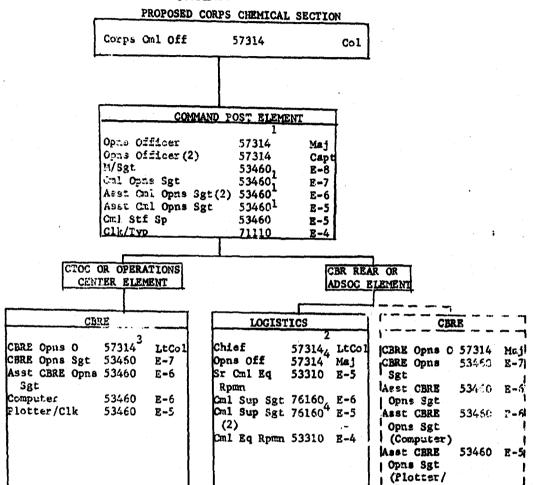
Total Personnel: Organic Corps: 6 Officers, 14 Enlisted Men.
Independent Corps: 7 Officers, 16 Enlisted Men.

Appendix 3 to Annex A

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- 1. Will form ADSOC CBRE when necessary.
- 2. Will be ADSOC Chemical Officer
- 3. Will be Asst Corps Chemical Officer.
- 4. Added for Independent Corps.

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#### APPENDIX 4 TO ANNEX A

#### PPOPOSED ARMY GRENICAL SECTION

Design_tion	<u>1405</u>	Strength	Grado
Army Gol O	0002	1	Brig Con.
Asst Cai O	57314	2	1-Col, 1-LtCol
CARE Opns O	57314	1	Lt Coly
Redl Dof Engr	57330	ī	Lt Cale
Supply Officer	54500	2	i-LtCol / i-Capt
Opus Officer	57314	. 4	2-Hej //2-Capt
Lielesa Officey	57314	1	Haj V
Adm Aset	2600	1	~ CHO ~
Sgt Hajor	53460	1	₩ E-9 ₩
Cal Opne See	53460	1	<b>≈ 2-6</b> ×
CIRE Cons Sec	53460	1	₩ <b>2-7</b>
Out Sup Sgr	76160	1	€ E-7 *
Cel Stf Spe	53460	2	£3-6 ·
Asst CBRE Opns Set	53460	1.	2-6 °
Aret Oak Opas Sgs	53460	3	\$ 2-E-6,01-8-5
Computer	53460		<b>~ E-6</b>
Steno	71220	2	£ <b>2-5</b> ∀
Br Cal Ey Ross	53310	<b>3</b>	
Plotter	53240		<i>⊌</i> 2-5
Cal Str Spc	53460	1	<b>1.8-4</b>
Cit./Typ	71110		E284
Call Sip Spr Sept 1	76140		<b>∠3-4</b>
Sr Geo Cike	71000	1	~ <b>8.4</b>
Gm Clk	71000		% E-3
The state of the s			
	<b>Y</b> 3	DTÁL 39 ×	

TOTAL 3

Toral Torsconel: 12 Afficers !! Verrant Afficer, 26 Enlisted Men.

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## UNCLASSIFIED PROPOSED ARMY CHEMICAL SECTION

	Army Cml Off	0002 Gen		
	Asst Cml Off			
	COMMAND POS	I ELEMENT		
Asst Cml Off Red1 Def Engr Opns Off Opns Off Liaison Off Opns Off (2) Adm Asst Sgt Major Cml Opns Sgt Cml Stf Spc		Steno Asst Cml Opns Sgt Cml Stf Spc Clk/Typ Sr Gen Clk	2) 71220 E- 53460 E- 2) 53460 E- 2) 71110 E-	5 4 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
FATOC ELEMENT			RMY REAR OR DSOC ELEMENT	
CBRE		LOGISTICS	CBRE	
		54500 <sup>2</sup> LtCo y Officer 54500 Capt up Sgt 76160 E-7	I CERE Opno 5	7314 Maj
Plotter /	53460 E-6 Cml St 53460 E-5 Sr Cm 71140 E-4 Clk/T	£ Soc 53460 K-6 L Eq Rpmn 53310 E-5 p 71110 E-4	Asst CERE 5	3460 E-61
	Cm1 Si Cen C	up Spc. 76110 E-4 lk 71000 E-3	Aust CBRE 5 Opns Sgt (Comput-	3460 E-6
				3460 E-5

- 1. Will form ADSOC CERE when necessary.
- 2. Will be ADSOO Chemical Officer.

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#### APPENDIX 5 TO ANNEX A

## PROPOSED CHEMICAL SECTION LOGISTICAL COMMAND "A"

Designation	MOS	Strength	Grade
Log Comd Cml O	57314	1	Major
Asst Cmlo & CBRE Opns O	57314	1	Capt
Cml Sup O	54500	1	Capt
Opns O	57314	1	Lt
M/Sgt	53460	1	E=8
CBRB Opns Sgt	53460	<b>.</b>	B=7
Cml Sup Sgt	76160	1	E=6
Asst CBRE Opns Sgt	53460	1	B=6
Computer	53460		B-6
Cml Stf Spc	53460	1	<b>2-5</b>
Plotter/Clerk	53460	<b></b>	E-5
Clerk Typist	71110	• 2	E-4
		TOTAL 13	

Appendix 5 co Annex A

PROPOSED CHEMICAL SECTION

LOGISTIC COMMAND "A"

Chemical Officer 57314 Maj

COMMAN	d post ble	ine
Opns Officer	57314	Lt
M/Sgt	53460	E-8
Clk/Typist	71110	E-4

LOGISTICS ELEMENT			
Chief	54500	Capt	
Cml Sup Set	76160	Z=6	
Cal Stf Spc	53460	2≃5	
Clk/Typiet	71110	2-4	

_	A)	GC E	EME	CERE	}
CERE	Opne	0		57514	Capt
CERE Asst	Opna CBRE	Sgt		53460 53460	E-7
Comp				53460	B-6
	ter/C	1k		53450	R-5

#### APPENDIX 6 TO ANNEX A

# PROPOSED CHEMICAL SECTION LOGISTICAL COMMAND "B"

Designation	MOS	Strength	Grade
Log Cond Cml O	57314	1	Lt Col
Asst Cal C & CBRE Opns O	57314	1	Maj
Opna Officer	57314	3	1-Maj, 1-Gapt 1-Lt
Cml Sup Officer	54500	1	Capt
H/Sgt	53460	1	E-8
CERE Opns Sgt	53460	1	B=7
Col Sup Sgt	76160	1	<b>E-7</b>
Aset CSRE Opna Sgt	53460	1.	E-6
Computer	53460	<b>£</b> 1	E-6
Plotter/Clk	53460	1	E+5
Cal Sup Spc	76110	8	1-2-5, 1-2-4
Cml Stf Spc	53460	2	1-6-5,1-2-4
Clk/Typ	71110	2	5-4

OTAL 18

Total Ressonal: 6 Officers, 12 Inlisted Non.

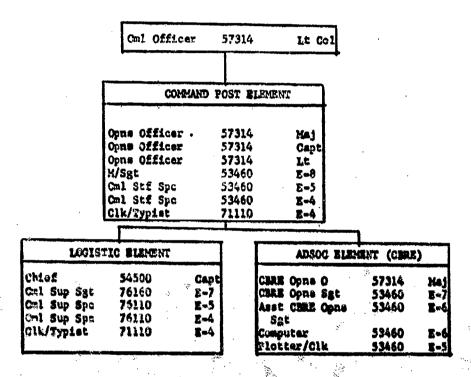
Appendix 6

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PROPOSED CHEMICAL SECTION

LOGISTICAL COMMAND "B"



MACH ASSESSED

#### APPENDIX 7 TO ANNEX A

## PROPOSED CHEMICAL SECTION LOGISTICAL COMMAND "C"

	· · · ·		
Designation	MOS	Strength	Grade
Log Comd Cml O	57314	1	Co1
Asst CmlO & CBRE Opns O	57314	. 1	Lt Col
Cml Sup Officer	54500	2	1-LtCol:1-Capt
Opns Officer	57314	2	1-LtCol,1-Capt
Radl Def Engr	57330	1	Maj
Sgt Major	53460	1	E-9
Cml Opns Sgt	75460	1	E-8
CERE Opne Sgt	53460	1	<b>5-7</b>
Cal Sup Sgt	76160	<b>1</b> ,	. <b>B−7</b>
Asst CBRE Opns Sgt	75460	1	<b>5-6</b>
Computer	75460	· 4 1	E-6
Plotter/Clk	75460	1	<b>E-5</b>
Cmi Sup Spa	76110	2	1-2-5, 1-2-4
Col Stf Spc	53410	2	1-E-5, 1-E-4
Glk/Typ	71110	2	E-4
Gen Clk	71000	1	<b>E-3</b>
	•		•

OTAL 2

Total Personnal: 7 Officers, 14 Inlisted Nep.

Appendix 7 to Annex A

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PROPOSED CHEMICAL SECTION LOGISTICAL COMMAND "C"

Cml Office	er 57314	Co1
COM	AND POST ELEME	NT
Opns Officer	57314	Lt Col
Radl Def Engr	57330	Maj
Opns Officer	57314	Capt
Sgt Major	53460	E+9
Cm1 Opns Sgt	53460	E=8
Cml Stf Spc	53410	B-5
Omi Stf Spc Clk/Typ Gen Clk	53410 71710 71000	E-4 E-4 R=3

LOGISTI	C ELEMENT	-
Chief	54500	Lt Co
Sup Officer	54500	Capt
Col Sup Sgt	76160	Ĝ•7
Cal Sup Spc	76110	E-5
Cal Sup Spc	76110	E=4
Clk/Typ	71110	E-4

A. C.

ADSOC ELEMENT	(CBRE)	
CBRE Opne O	57314	Lt Col
CBRE Opns Sgt	53460	E-7
Asst CBRE Opns	53460	E-6
Sgt		
Computer	53460	B-6
Plotter/Clk	53460	B-5

L-VII-I

## · UNCLASSIFIED APPENDIX 8 TO ANNEX A

## PROPOSED CHEMICAL SECTION LIGHT, MEDIUM, HEAVY, MISSILE COMMAND

Designation	MOS	Strength	<u>Grade</u>
Missile Comd Cml O	57314	· 1 1	Lt Col
Asst Cml O	57314	1	Capt
CBRE Opns O	57314	3 (2)*	Capt
M/Sgt	53460	1	E-8
Cml Opns Sgt	53460	1	E-7
CBRE Opns Sgt	53460	3 (2)*	E-7
Asst Opns Sgt	53460	3 (2)*	E-6
Computer	53460	3 (2)*	E-6
Plotter/Clk	53460	3 (2)*	E-5
		*****	•
•	momat	10	

"Heavy Missile Command requires only two each of the personnel.

Total Personnel: Light and Medium Missile Commands: 5 Officers, 14 Enlisted Men.

Heavy Missile Command: 4 Officers, 10 Enlisted Man.

Appendix 8 to Annex A

A-VIII-1

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PROPOSED CHEMICAL SECTION
LIGHT, MEDIUM, HEAVY, MISSILE COMMAND

	Cml Officer	57314	Lt Co
1/Sat 53460 R-A	Asst Cml Officer	57314	Capt
# UD	M/Sgt	53460	E-8
	Cml Opns Sgt	53460	B-7
		1	
		1	
		ĺ	

	(CBRE)	
BRS Opns Off	57314	Capt
BRS Opns Sgt	53460	E-7
lest Opns Sgt	53460	<b>E-6</b>
Computer	53460	<b>E-6</b>
Plotter/Clk	53460	B-5

Heavy Missile Command has only two CBREs.

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ANNEX B

PROJECT DIRECTIVES (U)

CONFIDENTIAL

UNCLASSIFIED

PROJECT DIRECTIVES (U)

CMLPD-CD

27 June 1957

SUBJECT: Project CCFRA 1-58, "Impact of CBR Operations on Requirements for Chemical Corps Personnel and Units" (U)

TO:

Commanding Officer

U. S. Army Chemical Corps Field Requirements Agency

Fort McClellan, Alabama

- 1. General. It is requested that a study be undertaken by your Agency to determine requirements for Chemical Corps staff elements and units essential to the Army in the field.
  - 2. Objectives and Scope.
    - a. The objectives of this study will be to determine:
- (i) Essential Chemical Corps staff representation at all levels of command within the field army under:
  - (a) Non-CBR conditions.
  - (b) CBR conditions.
- (2) A method of accomplishing augmentation of staffs as may be necessary when CBR conditions become imminent or actual.
- (3) Requirements for Chemical Comps units to support the Army in the field under:
  - (a) Non-CBR conditions.
  - (b) CBR conditions.
- (4) Optimum broad organizational atructure, mission and basis of assignment of Chemical Corps units under so
  - (a) Non-Car conditions.
  - (b) CBR conditions.
  - The scope of this study will include:
- (1) Analysis of the major responsibilities and workload anticipated for chemical staff elements within the field army.
- (2) Analysis of the workload anticipated for Chemical Corps troops units.
- (3) An evaluation of the adequacy of the current 1608 7314, prerequisites of a Staff Chamical Officer, guidance for selection of Staff Chamical Officers, and recommendations for training Staff Chanical Officers.

# UNCLASSITIMI CONFIDENTIAL

- a. Letter, this Office, CMLFD-CD, 27 February 1957, subject:
  "Chemical Corps Proposals FY 58 and FY 59 Study Projects for Inclusion in
  CDOG 57," with one inclosure. (NOTE: This reference indicates an initiation
  date for subject project as FY 59. USCONARC has concurred with the proposal
  of this Office that this project be rescheduled for initiation in FY 58.)
- b. CGSC draft study, "Frediction and Reporting of Radiological Fallout (U)," dated 1 April 1957.
- c. Theater Type Mobilization Corps Force (U) (Objective), 4 February 1957, short title: TIMCFO, DCSOPS (CONFIDENTIAL).
- d. USCONARC study, "Doctrinal and Organizational Concepts for an Atomic-Non-Atomic Army During the Period 1960-1970 (C), short title: PENTANA Army (U)," dated 10 May 1957.
- e. Chapter 1, Section III, paragraph 5, Chamical Corps Combat Development Program 4I, June 1957.
- f. Personal comments of various Chemical Corps Officers concerning requirements for chemical staff elements within the division (Inclosure 1 letters or comments).
- g. lat Indorsement, this Office, CMLPD-CD, 29 April 1957, subject: "Optimum CBB Protection (U)."
- 4. Assumptions. It will be assumed for the purposes of this study that:
- a. The recommendations of the study referenced in paragraph 3b, above, will be approved and implemented.
- b. The type field Army will be organized essentially in accordance with the PENTANA concept.
- c. The Department of the Army will not authorize additional Chemical Corps personnel at any level of command within the field Army beyond that considered essential under non-CBR conditions when CBR warfare is not incinent or actual (See Inclosure 2).
  - 5. Administration. -
- a. Priority: Reports on this project will be divided into three parts (reference subparagraph b, bolow) with priorities as follows:
- (1) First Phase Reports Priority a(3), as defined in reference 3s, above. For discussion of phase reports see reference 3s, above.)
- (2) Second Phase Report Priority b(2), as defined in colorence
- (3) Final Report Priority b(2), as defined in refuse to be submitted concurrently with the second polymerous.
  - b. Suspense dates: First Phase Report week of 15 October 1957.
- c. Estimated final completion dates of Second Phase Suport and Final Report: To be nominated in your project plan.



3-3

d. Distribution: Recommended distribution to be submitted with the draft of each phase and final report.

e. Coordination: As appropriate, provided that coordination is in accordance with reference 3e, above. The Chief, Combat Developments Division, Office of the Assistant Chief Chemical Officer for Planning and Doctrine, will be included among the addressess for informal coordination at each stage. Letters formally transmitting project plan, phase reports and drafts will indicate the degree of informal coordination accomplished.

- f. Funding: Utilize funds available under your current annual funding program.
- g. Project Plan: Forward to the Chief Chemical Officer, ATTN: CMLFD-CD, for review and formal approval. Necessary work for the first phase report will be initiated as soon as practicable without awaiting formal approval of the project plan.

#### h. Reports:

- (1) First Phase Report: This report will be limited to objectives stated in subparagraphs 2s(1) and (2), above. It is enticipated that in the near future this Office will be requested to prepare comments and recommendations concerning chemical staff requirements within the field Army for accomplishing the increased chamical staff responsibilities proposed by reference 3b, above (reference 3b, above). The draft of this first phase report should contain as detailed a justification for the recommendations proposed as is practicable in the time allowed.
- (2) Second Phase Report: To be limited to objectives stated in subparagraphs 2e(2) and (4), above.
- (3) Final Report: Summation of the essential findings of the total study.
- 1. Project Number: This project is assigned project number CCFRA 1-58.
- j. Frogress Reports: This is a Combat Development Project (CMCD 55-7) under the USCONARG Combat Developments Progress and will be reported in accordance with current combat development reporting instructions, ECS ATSHD-03. An initial progress report will be submitted within thirty days of receipt of this directive (reference paragraph Jg. above). For purposes of this report, the date of this directive will be considered as the date of initiation of the project.

FOR THE CHIEF CHEMICAL OFFICER:

2 Incl
1. Personal Cut of 11 Culc
Officers on Div Cul Orgn (U)
2. Cy of Cut 2, subj: "Doctrine
& Orgn," dtd 19 Sep 56,w/Cut 1
dtd 13 Aug 56

/e/ W. R. Currie /t/ W. R. CURRIE Brigadier General, USA Asst CCalO for Planning & Doctrins

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CMLPD-CD

9 March 1959

SUBJECT: Study Project CHLCD 58-7, "Impact of CBR Operations on Requirements for Chemical Corps Personnel and Units" (U)

TO: Commanding Officer

U. S. Army Chemical Corps Field Requirements Agency Fort McClellan, Alabama

- 1. Reference is made to the conference on "Requirements for CBR Trained Personnel in Non-Chemical Small Units," during the period 10-12 February 1959.
- 2. This letter will be considered as an adjunct to the original project directive dated 27 June 1957.
- 3. It has been decided, after discussion with it Colonel Hertel, to realign study project CHECD 58-7 into a number of separable yet related segments. As now realigned, the project allows for possible future expansion into additional segments which may, in the future, be considered appropriate. To assure early use of significant findings during the course of this comprehensive project, each segment should be reported on separately.
- 4. The project has thus far been divided into the following segments:

#### Phase 1 - Personnel

- Fart A Requirements for Chemical Corps Staff Personnel at Division, Corps, and Army Levels (U).
- Fart B MOS Requirements for Chemical Personnel in the Army in the Field (U).
- Fart C Requirements for CRR Trained Personnel in Non-Chamical Small Units (U). (Forwarded to USCONARC, 16 February 1959.)

#### Phase II - Units

- Fort A Requirements for Chemical Corps Units in the Army in the Field (U).
- 5. In light of developments since July 1959, approval of the report on Phase I, Study Mr. 1, Personnel Planning, CMCD 58-7, is restinded. It is desired that this report now referred to as Phase I, Part A, "Requirements for Chemical Corps Staff Personnel at Division, Corps, and Army Levels (U)," be rewritten to incorporate modifications discussed with representatives of USCONARC (Colonel Breaks in October 1958, Major Osick in November 1958) and with personnel of this Office during Pabruary 1959.
- a, hodification of the report should include revision of the title page and cover to correspond with the format of the report on Phase I, Fart C.
- b. The method to replace previously approved and distributed copies may be determined after you modify the report dated July 1938.

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- c. Since it appears that revisions will be principally editorial, it is hoped that the report can be modified by an early date.
- d. It is desired that your revised report on Part A, Phase I, be submitted to this Office for review and approval prior to final printing.
- 6. In reference to Phase I, Part B, the need to examine all statf and specialist MOS's monitored or trained by the Chemical Corps has recently become apparent. This problem concerns both the qualitative aspects of the MOS and the number of personnel so qualified who are required currently or will be required in the future throughout the Army in the field. Therefore a subproject directive which will expand the scope of Phase I, Part B, beyond that indicated in the original directive will be issued by this Office.
- a. In order to serve the personnel planning actions of DA, it is necessary to complete Phase I, Part B, as expanded, by 31 December 1959.
- b. In addition to requirements for Chemical Corps Officer, Phase I, Part B, should include consideration of branch immaterial, other technical services and arms requirements for MOS 7330 and 47330 qualified personnel.

FOR THE CHIEF CHEMICAL OFFICER:

Info Cy: Pres, USACmlCBd /s/ Lloyd E. Fellenz /t/ LLOYD E. FELLENZ Colonel, CmlC Acting Asst CCmlO for Planning & Doctrine

CMLPD-CD

10 November 1959

SUBJECT: Project Directive CMLCD 59-27, "Requirements for Chemical Corps-Trained Officers by MOS, Army in the Field, 1961-1965" (U)

TO:

Commanding Officer
U. S. Army Chemical Corps Field Requirements Agency
Fort McClellan, Alabama

#### 1. General.

- a. You are requested to accomplish project CMLCD 59-27, "Requirements for Chemical Corps-Trained Officers by MOS, Army in the Field, 1961-1965," in accordance with the Combat Development Project Schedules, Part 5A, Annex C, Chemical Corps Operating Program, FY 1960.
- b. This project, CMLCD 59-27, replaces the formerly programmed Part B, Phase I, Project CMLCD 58-7, which is cancelled.
- 2. Objective. The objective of this project is to develop predictions pertaining to the quantitative and qualitative requirements of the Army in the field during 1961 to 1965 for officers with MOS's for which the Chemical Corps has training or training monitorship responsibility.
- 3. Purpose. The purpose of this project is to provide guidance to assist in planning for officer procurement and training.

#### 4. Scope and Considerations.

- a. The scope of your predictions will be confined to stating the numbers of officers of appropriate grades and described capabilities required to do the essential tasks associated with specific Chemical Corps officer spaces which can be reasonably anticipated to exist in the army in the field during the period considered.
- b. Quantitative predictions will be expressed in numbers of officers required in each grade and MOS.
- c. Qualitative requirements will be expressed in terms of grade and MOS. MOS's will be fully described in terms of duties which must be performed, skills inherent to performance of such duties, and prerequisite training and experience considered desirable for the various position levels.
- d. Predictions for qualitative and quantitative requirements will be specified for the current situation and for mobilization under current mobilization plans based on the assumptions contained in paragraph 6. Additionally, any changes to the predictions based on the MOMAR concept will be stated in general terms.
- e. All MOS's and MOS prefixes for which the Chemical Corps has monitorship responsibility, or for which Chemical Officers in the field have a need will be considered. Your report may, as appropriate, consider and propose new MOS's or modification or elimination of existing MOS's.

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- f. Clear delineation between the qualifications and requirements for each MOS and each prefix must be shown (e.g., 7330 vs. 4-7330).
- g. It is not intended that this study evaluate or propose methods of officer training or procurement. However, when it is appropriate to do so, the project report may differentiate between various levels of qualification by indicating type and level of civilian or military education required (e.g., Master's Degree--Nuclear Physics; CmlC Officers Advanced Course).

#### 5. References.

- a. Letter, CMLPD-CD, OCCmlO, 10 July 1959, subject: "Guidance for Project CMLCD 59-27, 'Requirements for Chemical Corps-Trained Officers by MOS Army in the Field 1961-1965,'" (U).
- b. The Troop Program of the Army; Annex I, "Troop Basis Data (U)," Section V, "Current Actions Strength (U)," 31 December 1958.
  - c. Mobilization Troop Program of the Army, FY 1960 (U).
- d. AGAM-P (M) 381 DCSOPS, "Transition Plan for Period 1959-1965" (U), 1 May 1959.
- e. Chemical Corps Combat Development Study Project Report CMLCD 58-7, Phage I, Part C, March 1959 (U).
- f. Letter, CMLPD-CD, OCCm10, 16 February 1959, subject: "Personnel Requirements for Effective CBR Combat Posture" (U),
- g. Letter, ATTNG-D&L 320.2(8), Hq., USCONARC, 6 March 1959, subject: "Personnel Requirements for Effective CBR Combat Posture in Seventh U. S. Army" (U).
- h. Letter, OPS OT OR 2, DA, 3 April 1959, subject: "Personnel Requirements for Effective CBR Combat Posture in Seventh U. S. Army" (U).
- i. "Modern Mobile Army 1965-1970 (U)," 1 July 1959, Hq., USCONARC, (SECRET).
- j. Letter, ATTNG-D&R 470(S), Hq., USCONARC, 16 June 1959, subject: "CBR Warfare Copability" (U).
- k. Chemical Corps Combat Development Study Project Report CMLCD 58-7, Phase II, to be published (U).
- 1. Chemical Corps Combat Development Study Project Report CMLCD 58-7, Phase I, Part A, Revised, to be published (U).
- m. USA C&GSC Study, July 1959, "Study of Command Posts of Division to Field Army Level, Time Frame Present 1962" (U).
- n. Training Text 100-5-3, Hq., USCONARC, 8 January 1958, "Control, Coordination, and Integration of Field Army Taptical Operations (The Army Operations Center)" (U).
- o. Memorandum Nr. 16, USCONARC, 7 April 1958, "Staff Organization for the Army in the Field Under Atomic Warfare Conditions," (U).
- p. Draft FM 101-5, "Staff Organization and Procedure" (U), March, 1959.

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- q. Project Report MR C&GSC 56-7, "Theater Army Organization" (U), 31 July 1958.
- r. Study Report, USA Command and General Staff College 58-1, "Study of Staff Structure for Major Units of the Field Army" (U), 12 January 1959 (SASFA).
- s. SR 605-105-5, "Officers Commissioned and Warrant Officer Personnel Military Occupational Specialties," (U), March 1954.

#### 6. Assumptions. It will be assumed:

- a. That the major elements composing the current troop list (reference 5b) will remain essentially unchanged.
- b. That current mobilization plans (reference 5c) will remain essentially unchanged.
- c. That evolution of the army organization will be in accord. With the current transition plan, reference 5d.
- d. That by 1963 divisional and nondivisional battle groups will each have one Chemical Officer authorized by Table of Organization, and that upon mobilization Chemical Officers will be provided to units smaller than division size as recommended in reference 5e, f, and j and discussed in reference 5g.
- e. That requirements for Chemical Corps officers for the staffs of divisions, corps, independent corps, army, logistical commands, and missile commands as proposed in reference 51 will be approved and spaces will be authorized by 1963 or upon mobilization, whichever occurs first.
- f. That the final draft, FM 101-5, March 1959, currently being processed, will be approved and published.
- g. That the TOC and ADSOC concepts essentially as outlined in reference 5m (Command Post Study) will be adopted and implemented by 1963 or upon mobilization, whichever occurs first.
- h. That the current requirement for Chemical Corps officer positions requiring prefix 5's will not necessarily remain valid during 1961 to 1965.

#### 7. Administration.

- a. Coordination: During your study of the problems concerning these requirements, it is desired that as a minimum, you consult with appropriate individuals of this Office to assure awareness of the latest available pertinent plans and of the anticipated use of your final product. You are also authorized to consult as you consider appropriate with any of the Army Combat Development Agencies, and with any element of the Chemical Comps. Your draft project report should be referred to the Chief, Combat Developments Division, this Office, for informal review before preparation and submission of your final report. U. S. Army Command and General Staff College and the Chemical Corps Training Command should also have an opportunity to review the draft project report.
- b. Suspense Dates: The initial draft report will be submitted for Combat Developments Division review by 31 December 1959. The target date for completion of the final report is 15 February 1960.

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- c. Distribution: A recommended distribution list for your final report will be submitted with your draft report and later included as an integral part of your final report document.
- d. Funding: Utilize funds available under your current annual funding program.
- e. Project Status and Progress Reporting: This project, CMLCD 59-27, is a Chemical Corps Combat Development Project not listed in CDOG. Semiannual project reports (ATSWD 03) will be submitted.

FOR THE CHIEF CHEMICAL OFFICER:

Info Cy:
Chief, PersDiv, OCCmlO
Chief, P&T Div, ACCmlO/P&D
CG, USAG&GSC, ATTN: CD
CO, USAGmlCTNGCOM

LLOYD E. FELLENZ Colonel, CalC Asst CCmlO for Planning & Doctrine SECRE

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ANNEX C

BIBLIOGRAPHY (U)

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C-1



#### BIBLIOGRAPHY (U)

- 1. (U) FM 21-41, 1953, Soldier's Manual for Defense Against Chemical, Biological, and Radiological Attack (Ch. 1, 2, 3, 4). (UNCLASSIFIED)
- 2. (U) FM 21-48, 1954, CBR Training Exercises (Ch 2). (UNCLASSIFIED)
- (U) SR 605-105-S, DA, Commissioned and Warrant Officer Personnel Military Occupational Specialties, March 1954. (UNCLASSIFIED)
- 4. (U) FM 101-5, November 1954, Staff Officers' Field Manual, Staff Organization and Procedure. (UNCLASSIFIED)
- 5. (S) Letter, AETCG 470/7, Hq Seventh US Army, 29 Nov 1957, subject: "Essential Military Requirements for Effective CBR Posture Within Seventh United States Army (SECRET)
- (U) FM 3-8, 1955, Chemical Corps References Handbook (Ch 7, par 34.2). (UNCLASSIFIED)
- 7. (U) Training Text 100-15-1, Field Service Regulations. Larger Units, dated February 1955. (UNCLASSIFIED)
- 8. (U) AR 611-201, DA, Manual of Enlisted Military Occupational Specialties, March 1955. (UNCLASSIFIED)
- 9. (U) Report of Army Test Exercise SAGE BRUSE, Vol III, Part Two, dated 28 Nov 1955. (CONFIDENTIAL)
- 10. (U) Chemical Corps Staff Study, subject: "Estimation of Casualties from Chemical Warfare (U)," dated 3 February 1956. (TOP SECRET)
- 11. (U) Report, Chemical Corps Field Requirements Group (now U. S. Army Chemical Corps Field Requirements Agency), 7 February 1956, subject: "Radiological Survey Requirements and Organization (U)." (CONFIDENTIAL)
- 12. (U) Report of Army Test, Exercise SAGE BRUSH, Part One, Summary, 18 Feb 1956, Fort Sam Houston, Texas. (CONFIDENTIAL)
- 13. (U) PM 101-31, July 1959, Staff Officers' Field Manual, Nuclear Weapons Employment. (SECRET)
- 14. (U) Latter, ATINT 354 (KING COLE), USCONARG, 31 December 1956, subject:
  "Plan of Troop Test, Intelligence Doctrine, Exercise KING COLE."
  (UNCLASSIPLED)
- 15. (U) Study and Analysis of the Optimum Intratheater Logistic Support System for a FENTANA Field Army During 1960-70 Decade, First Interim Report, NEL PAR, Inc., CDOG, USCONARC (CD) 57-5. (SECRET)
- 16. (U) AR 220-58, 1957, Organization and Training for Chamical, Biological, and Radiological Warfare, (UNCLASSIFIED)
- (U) Automatic Data Processing for a Type Field Army, 15 March 1957, U. S. Army Electronic Proving Ground, Fort Muschuca, Arizona (U). (CONFIDENTIAL)
- 18. (U) Finel Report Exercise KING COLE, 25 March 1957 16 April 1957, Part II, (SECRE)

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SECRET

- 19. (U) Letter, ALLRD 181, U. S. Army C&GSC, subject: "Prediction and Reporting of Radiological Fallout," 29 March 1957 and 1st Ind, CMLFR-O, CmlC Field Requirements Agency, 22 April 1957. (FOR OFFICIAL USE ONLY)
- 20. (U) AR 500-70, DA, "Emergency Employment of Army Resources," 26 April 1957. (UNCLASSIFIED)
- 21. (U) Results of Evaluation of CBR Proficiency Tests, FY 1957, of General Army Interest, Chemical Corps Training Command, Fort McClellan, Ala., 10 May 1957. (UNCLASSIFIED)
- 22. (U) U. S. Army Chemical Corps Historical Study, "Gas Warfare in World War I," (Gas Warfare at Belleau Wood, June 1918), June 1957. (UNCLASSIFIED)
- 23. (U) PENTANA Army (U), Abridged Edition, USCONARC, 3 June 1957. (SECRET)
- 24. (U) Final Report of Troop Test, Intelligence Doctrine Exercise, "KING COLE," 3 June 1957. (CONFIDENTIAL)
- 25. (U) Final Report, Exercise KING COLE, 27 March 1957 16 April 1957, Part I (Less Annexes), 13 June 1957. (CONFIDENTIAL)
- 26. (U) Initial Concepts for the TAPFA Force (U), 3 July 1957, USCONARC. (SECRET)
- 27. (U) AR 701-6350, DA, 22 July 1957, Logistic Responsibilities, Miscellaneous Alarm and Signal Systems. (UNCLASSIFIED)
- 28. (U) Selected Application of Non-Lethal BW and CW Weapons, Volume I Summary "Project Summit," 31 March 1959, The Institute for Cooperative Research, University of Pennsylvania. (UNCLASSIPIED)
- 29. (U) FM 100-1, Change 9, CBR Operations, 23 September 1957, Field Service Regulations, Doctrinal Guidance. (UNCLASSIFIED)
- 30. (U) TOE Nr. 3-7D, Chemical Company, Combat Support, Hq USCONARC, 26 September 1957. (UNCLASSIFIED)
- 31. (U) Letter ATCG 350.001/8(S) (1 Oct 57) USCONARC, 1 October 1957, subject:
  "Address by the Commanding General, USCONARC to the Armed Forces Staff
  College, 9 September 1957." (SECRET)
- 32. (U) Instructions Booklet "Preparation and Reporting Format of Systems
  Analysis Study on Potential Tactical Army ADPS Application," 1 November
  1957, U. S. Army Electronic Proving Ground, Fort Huachuca, Arizona.
  (UNCLASSIFIED)
- 33. (U) Address given by Major General William H. Creasy, former Army Chief Chemical Officer, 7 November 1957, to the Army War College. (SECRET)
- 34. (U) Report of Conference, Prediction and Monitoring of Radiological Fallout, U. S. Army CAGSC, 27 November 1957. (FOR OFFICIAL USE ONLY)
- (U) Address by the Commanding General, United States Continental Army Command, to the Air War College, 11 December 1957 (U), U. S. Army COMARC, 19 December 1957. (SECRET)
- 36. (U) Robert M. Bullard (Lt General), New York, 1925, "Personalities and Reminiscences of the War" (U). (UNCLASSIFIED)
- 37. (U) Final Report, Unnumbered Study Project, "Organization and Operation of the Theater Army Replacement and Training Command," USA CLGSC, 15 March 1959, (U). (UNCLASSIFIED)

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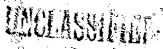
- 38. (U) FM 3-130, 1958, US Army Chemical, Biological, and Radiological (CBR) Intelligence (U). (CONFIDENTIAL)
- 39. (U) AEPG-Sig 940-22, "Automatic Data Processing for a Type Field Army,"
  USA Electronic Proving Ground, 15 March 1957, (U). (CONFIDENTIAL)
- 40. (U) FM 30-7, 1958, Combat Intelligence; Regiment, Combat Command, and Smaller Units. (UNCLASSIFIED)
- 41. (U) TM 3-200, 1958, Capabilities and Employment of Toxic Chemicals. (UNCLASSIFIED)
- 42. (U) Training Text 100-5-3, Hq USCONARC, "Control, Goordination, and Integrating of Field Army Tactical Operations (The Army Operation Center),"
  8 January 1958. (FOR OFFICIAL USE ONLY)
- 43. (U) Presentation by Major General W. M. Creasy to the Army Logistics
  Management Center, Fort Lee, Virginia, 28 January 1958. (SECRET)
- 44. (U) Study Project CMLCD 57-3, "Organization for Radiological Survey (U),"
  U. S. Army CmlC Field Requirements Agency, Fort McGlellan, Alabama,
  10 February 1958. (CONFIDENTIAL)
- 45. (U) TOE 3-500D, Chemical Service Organization, U. S. Army CONARC, 14 February 1938. (UNCLASSIFIED)
- 46. (U) Automatic Data Equipment Development Report Nr. 1, U. S.Army Signal Research and Development Laboratory, Fort Monmouth, N. J., 10 March 1958 (U). (UNCLASSIFIED)
- 47. (U) Memorandum Nr. 16, USCONARC, dated 7 April 1958, Staff Organization for the Army in the Field Under Atomic Warfare Conditions. (UNCLASSIFIED)
- 48. (U) Letter, ATTNG-D&R/65, USCONARC, dated 24 April 58, subject: "Report of Conference on Prediction, Reporting and Monitoring of Endiological Fallout." (FOR OFFICIAL USE ONLY)
- 49. (U) Study Project CHLCD 57-6, "CBR Protection (U)," U. S. Army CmlC Field Requirements Agency, Fort McClellan, Alsbams, Phase I, "Basic Concepts of CBR Protection (U)," 21 May 1958. (SECRET)
- 50. (U) Letter, ATSMR-G 413.4/90, USCONARC, 6 June 1958, subject: "Project Directive for Participation in Material Development of the Operation Central, AN/MSQ-19 ( ) (TOC) (U)." (COMPIDENTIAL)
- 51. (U) Memorandum for the Chief Chemical Officer, 17 June 1958, subject:
  "Chemical Corps Radiological Warfare Missions," from the Deputy Chief
  of Staff for Logistics (U). (UNGLASSIFIED)
- 52. (U) Draft, USA C&GSC, 10 July 1958, subject: "Concepts of Field army Operations During the Feriod 1963-68." (U) (SECRET)
- 53. (U) Pamphlet 8, CBR Training Guide, U. S.Army Chemical Corps School, July 1958. (UNCLASSIFIED)
- 54. (U) Letter, ATTNG-DER 322/16, Ng USCONARC, Fort Monroe, Va., 15 July 1958, subject: "Revised Type Gorpe and Field Army," (U). (UNCLASSIFIED)
- 55. (U) Project for Participation in Natural Development of the Operations
  Central, AN/MQ-19 ( ) (TOG) (U), US Army CAGSG, "Concept of Field
  Army Operations During the Period 1963-68," 15 August 1958, Short Title.
  "Field Army Concept" (U). (SECRET)

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56. (U) Letter, AETCG, Hq, Seventh U.S. Army, 29 August 1958, subject:
"Personnel Requirements for Effective CBR Combat Posture in Seventh Army." (U). (SECRET)

- 57. (U) USCONARC Training Directive, Annex C, Atomic and CBR Training, 8 Sep 58. (UNCLASSIFIED)
- 58. (U) Future Field Army Data Processing System Study, 15 September 1958. Volumes I, II, III, U. S. Army Signal Engineering Laboratories, Fort Monmouth, New Jersey (U). (SECRET)
- 59. (U) Letter, ATTMG-D&R 322, USCONARC, 3 October 1958, subject: "Implementation of the USCONARC Evaluation of the Army Operations Centers (U)." (CONFIDENTIAL)
- 60. (U) USCONARC, 20 October 1958, "Evaluation of the PENTANA Battle Group" (U). (SECRET)
- 61. (U) Letter, ATSWB-F 322/3 Armv (S) USCONARC, 7 May 1958, subject: "Transition Plan for Period 1959-1965 (U)." (SECRET)
- (U) Letter, ATTNG-DER 4070/21, USCONARG, 3 November 1958, subject: "Ground Flame Warfare (U)." (SECRET)
- (U) FH 3-5, DA, 5 November 58, Tactics and Techniques of Chemical, Biological, and Radiological (CBR) Warfare (U). (UNCLASSIFIED)
- (U) FM 21-40, DA, 5 November 58, Small Unit Procedures in Atomic, Biological, and Chemical Warfare (U). (UNCLASSIFIED)
- 65. (U) TC Nr. 101-1, DA, 8 December 1958, Frediction of Failout and Radiological Monitoring and Survey. (UNCLASSIFIED)
- 66. (U) Latter, ATSVD-R T61/226, USCONARG, 15 December 1958, subject: "First Quarter, Fiscal Year 1959, Review and Analysis of Combat Developments (U)." (SECRET)
- 67. (U) Study Project CMLCD 58-11, "Requirements for Radiological Monitoring of Personnel, Supplies, and Equipment (U)," U. S.Army Calc Field Requirements Agency, Fort McClelian, Alabams, 23 December 1958. (SECRET)
- (U) Project for Participation in Materiel Development of the Operations Central, AN/MSQ-19 ( ) (TOC) (U), US Army CocsC, "Combat Developments Study Project Number USACCSC 58-1, Study of Staff Structure for Hajor Units of the Field Army," 12 January 1959, SASFA Study, Phase II. 12 January 1959 (U). (CONTIDENTIAL)
- 69. (U) Letter, ATTNG-DER 320.3/14, USCONARG, 28 January 1959, subject: "Changes in TOE (U)." (UNCLASSIFIED)
- (U) Project for Participation in Material Development in the Operations Cantral, AN/MEQ-19 ( ) (TOC) (U), USA CAGAC, "Control and Coordination 70. of Field Army Tectical Operations (TOC) During the Period 1964-1948." Short Title: "TOC Concept," 31 January 1959 (U). (COMPIDENTIAL)
- 71. (U) Combat Development Project Report CHCD 30-7, Phase 1, Part 5, March 1959, subject: "Requirements for CLR Traints Foreganal in Non-Chemical Small Units (U)." (SECRET)
- 72. (U) Initial Hammeript Draft, DA, PM 101-S, Staff Officers Manual, March 59 (U). (UNCLASSIBLES)



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- 73. (U) Letter. ATSWD-G 413.5/7, USCONARC, 3 March 1959, subject: "Summary of DA/US CONARC Automatic Data Processing System(s) (ADPS) Committee Meeting at Hq Department of the Army, 22 Jan 59 (U). (UNCLASSIFIED)
- 74. (U) Combat Development Project Report CMLCD 58-10, January 1958, subject: "Radiation Dosimatry (U)." (SECRET)
- 75. (U) Final Report, Troop Test, "Detection of Atomic Bursts and Radioactive Fallout (U)," US Army Artillery and Guided Missile School, 13 Dec 1957 (U). (UNCLASSIFIED)
- 76. (U) Final Report, Combat Development Project Report, C&GSC 56-7, "Theater Army Organization (U)." (UNCLASSIFIED) 19 Oct 1957.
- 77. (U) Letter, ATSN D-P 461 (3), USCONARC, 25 Sep 1958, subject: "Interim Comments, TAPFA Concept (U)." (SECRET)
- 78. (U) Army Requirements Development Plan for the Period 1966-1969, Office Deputy Chief of Staff for Military Operations US Army, 1 Feb 1958, Short Title: "ARDP-60," (U). (TOP SECRET)
- 79. (U) Combat Development Project Report CHLCD 57-5, 23 June 1959, U. S. Army ColG Board, "Exploitation of Tactical Chemical Warfare (U)." (SECRET)
- 80. (U) FN 54-1, DA, July 1959, The Logistical Command. (UNCLASSIFIED)
- 81. (U) Final Draft Manuscript, Command Post Study, July 1959, U. S. Army Command and General Staff College, Fort Leavenworth, Kansas (U). (CONFIDENTIAL)
- 82. (U) TOE Advance Plane, U. S. Army Hissile Command (Medium), 14 April 1959, U. S. Army Artillery and Hissile School, Fort Sill, Oklahoma (U). (UNGLASSIFIED)
- 83. (U) Address given by Major General Marshall Stubbs, Army Chief Chemical Officer before the ANA County Medical Societies Civil Defense Conference, 8 November 1959, Chicago, Illinois (U). (UNCLASSIFIED)
- 64. (U) Final Report, Troop Test Radielogical Survey and Reporting (RADSURV DUO), Exercise DRACON HEAD, 1 December 1959. (UNCLASSIFIED)
- 85. (5) Letter, AETCS 250/U5.4, He Seventh US Army, 23 January 1958, subject: "Combat Requirements for Hazzive Offensive CHEMICAL, FLAME, and HE Optimum Frag Head Rocket Vespons System (8)." (SECRET)
- 86. (U) Letter, AETCC 250/17, Mg Seventh US Army, 30 March 1959, Aubject: "Foresanel Requirements for Effective CBR Combat Feature in Seventh US Army (U)." (UNCLASSIFIED)
- 87. (U) Latter, AZTCC 250/UE.3, Hq Seventh US Arey, 2 December 1958, subject: "Requirement for a Refined Fallout Frediction Nothed Useful to Tactical Commanders (U)." (CONFIDENTIAL)
- 88. (U) Letter, ARTKCH 265/76, He 4th Armored Division, 9 April 1959, subject: "Augmentation of Division Chemical Section (U)." (SECRET)
- 89. (U) Letter, ARTCC 250/17, He Seventh US Army, 11 Herch 1959, subject:
  "Requirement for Mobile Power-driven Decontaminating Apparatus (U)."
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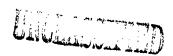
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ANNEX D

COORDINATION (U)

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## COORDINATION (U)

- 1. (U) The initial draft of Phase I, Part A, CHICD 58-7, was submitted to the following combat development agencies for review and comment:
  - s. US Army Armor School
  - b. US Army War College
  - c. US Artillery and Missiles School
  - d. US Army Aviation School
  - e. US Army Command and General Staff College
  - f. US Army Infantry School
  - g. The Adjutant General, Department of the Army
  - h. US Army Transportation Corps Combat Developments Group
  - i. US Army Engineer School
  - j. US Aray Aray Intelligence Conter
  - k. Quartermaster Board, US Army
  - L. Chief Signal Officer
  - m. US Army Medical Service Combat Development Group
  - a. US Army Europe
- 2. (U) The following combat development agencies concurred in the revised initial draft of the study project:
  - a. US Army Medical Service Combat Development Group
  - b. US Army Transportation Combat Development Group
  - c. Querteraster Board, US Army
  - de US Army Aviation School
  - e. US Army Engineer School
- 3. (U) Comments from the Adjutant Comerci, Department of the Army, water now required.
- 4. (6) Companie from the following contact development agencies are listed below, together with the action taken:
  - 4. (U) US Army Amer School:

CONSERT: " . . . The US Army Armor School has reviewed and concurs in that postion of subject study partaining to the amorad division

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provided the necessary spaces for the armored division augmentation are furnished from outside division sources."

ACTION: Moted.

b. (U) US Army War College:

COMMENT: "The subject study has been reviewed and a determination made that it is not in conflict with current theater army and army group doctrine."

ACTION: Noted.

c. (U) US Army Artillery and Guided Missile School:

COMMENT: US Army Artillery and Missile School concurs generally in the conclusions and recommendations of the study.

"2. While the recommended number of personnel at the various levels appear to be adequate, their determination is considered as not within the purview of this School."

ACTION: Noted.

d. (0) US Army Command and General Staff College:

(1) COMMENT: "The term Chemical Officer should be substituted for "Staff Chemical Officer" throughout the manual. "Chemical Officer" is the correct title of the chemical special staff officer. See AR 320-5 and FM 101-5."

ACTION: The use of the term "staff chemical officer" in the revised initial draft of the study was not intended as a title for the Chemical Officer. However, since its use is questioused, the term has been changed where appropriate to conform to the recommendation.

(2) COURTY: "Recent information from HQ USCOURC on preparation of the FATOC/ICTOC/CTOC training circular indicates that the "sections" will be redesignated "elements" (e.g., Chumical, Biological, Radiological Element (CRE), and that a Data Processing Element (CRE) will be added."

ACTION: Concur. appropriate changes have been eads to the

(3) COMMET: "The term eyes design control should be substituted for "rest area design control" throughout the manuscrist. (Current terminology.)"

ACTION: Concur. Recommended substitution has been made

in the study.

study.

(4) COVERT: "Justification for changing the grace of the field approximation for changing the grace of the field approximation included."

ACTION: Notes.

(5) CONTENT: "This study provides for the use of a CRRS (CRRS) in the division service area and in the taction) corps year alea. (Gas paras 2g(4)(b) and 2f(2)(b)). In view of the envisioned him of these areas takes additional CRRS (CARS) is considered pages searcy."

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ACTION: Non-concur. In both instances the text of the study clearly points out that a CBRE capability in the ADSOC (or logistical center) is provisional and is obtained by augmenting the chemical element in the ADSOC with personnel from other elements of the chemical section. It is felt that this provisional capability is minimal and that it should remain in the study.

(6) COMMENT: (page 4, para 2e, lines 1-2). "The meaning of this assumption is not clear."

ACTION: Concur. The assumption has been re-stated. See also subparagraph d(8) which follows.

(7) COMMENT: (Page 4, para 2f, all). "The validity of this assumption should be verified with USCONARC. Recent USCONARC guidance pertaining to draft FM 101-5 stated 'The staff responsibilities and functions in prediction of radiological fallout should be changed to agree with approved doctrine in DATC 101-1."

ACTION: This assumption is considered valid. During the past two years, field exercises and confurences have indicated that the fallout prediction for friendly as well as for enemy nuclear weapons should be a RADC (now CBRE) responsibility. In fact, the two most recent documents (listed below) pertinent to the subject have indicated the soundness of such assignment of responsibility.

- 1. Report of Conference on Indirect Nuclear Burst
  Assessment and Surveillance System (INBASS), held at Hq USCONARC, 19-22 January
  1960.
- 2. Final Report, Troop Test RADSURV DUO of Exercise DRAGON HEAD, 1 December 1959.
- (8) <u>COMMENT</u>: (Page 5, para 4a(1), lines 5-7). "Delete" in order to provide and with a CBR operational readinese capability. (Clarity and accuracy. See also comment 6.)"

ACTION: Non-concur. The inclusion of the phrase "CBR operational readiness" is deliberate throughout the study. It was done in an attempt to point up and emphasize the fact that any command must be prepared at all times to function effectively under CBR conditions.

(9) COMMENT: (Page 6, para 4c(2), lines 6-7). "Delete and the command post' and substitute and in the chemical staff section. (Accuracy and clarity.)"

ACTION: Concur in part. Sentence has been changed in the study to read: "and in the chemical staff section normally located at the command post." See also subparagraph d(16) following.

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(10) <u>COMMENT</u>: (Page 6, para 4c(2)(a), lines 1-4). "Delete the first sentence and substitute <u>In tactical commands the staff activities associated with current tactical and tactical support operations are conducted in the tactical operations center. (Accuracy. In the logistical command the ADSOC is basically an information processing and display facility.)"</u>

ACTION: Concur. Recommended substitution has been made in the study.

(11) COMMENT: (Page 8, para 4c(5), lines 8-10). "Delete last sentence and substitute: During periods when the unit is not engaged in active operations, the CRR element performing current functions in the operations centers may be phased down in varying degrees and personnel used in the function of primary concern to the command at the time. (Shifting of personnel from one function to another takes place as required by the mission of the command. This shifting of personnel is not an expedient but a routine adjustment to provide the commander with the distribution of personnel best suited to the successful accomplishment of the command's mission.)"

ACTION: Non-concur. The shifting of personnel within the chemical section from one activity of the section to another that is over-loaded, referred to in paragraph 4c(5) of the study, was not intended to describe routine shifting of personnel during periods when the unit is not engaged in active operations. The paragraph has been altered in an attempt to emphasize the fact that the proposed changes in the strength authorizations of the various chemical sections, while austere, do provide the Chemical Officer with an improved capability and flexibility not possible under current tables of organization.

(12) COMMENT: (Page 6, para 4c(2)(a), line 9). "Ingert after 'analyzing targets' for chemical and biological attack. (Accuracy. Analysis of nuclear targets is accomplished in the Fire Support Element (FSE) of the TOC.)"

ACTION: Concur. Recommended insertion has been made in the study.

(13) <u>COMPENT</u>: (Page 6, para 4c(2)(a), line 13). "Delate reference to Division Tactical Operations Center (DTOC). (Although a tactical operations center for use at division level has been recommended by USACGSC, the revised FATOC/ICTOC/CTOC training circular will not include a DTOC. HQ USCONARC has accepted a USACGSC proposal that the RAD center be redesignated the CBR Center (CBRC) and that the functions of the CBRC be broadened to include chemical and biological activities.)"

the study. ACTION: Concur. Reference to DTOC has been deleted from

(14) COMMENT: (Page 7, para 4c(2)(b), line 2). "Add after logistical operations center' when one is established. (Accuracy. Corps, field army, and missile command do not have a formal logistical control center.)"

ACTION: "Concur. The recommended addition has been made

to the study.

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(15) COMMENT: (Page 7, para 4c(2)(b), line 7). "Add area before 'damage control.'

ACTION: Concur. The recommended addition has been made to the study.

(16) <u>COMMENT</u>: (Page 7, para 4c(2)(c), line 7). "Delete main command post' and substitute <u>chemical staff section</u>. (Accuracy.)

ACTION: Concur in part. In order to retain the thought that the "command" element of the chemical section normally will operate from the main CP of the command, the sentence referred to has been changed to read:

". . . will be conducted in the chemical staff section at the main command post." See also subparagraph d(9) above.

(17) <u>COMMENT</u>: (Page 8, para 4c(4), lines 8-9). "Delete 'to provide 'hese chemical sections with a CBR operational readiness capability' and substitute to perform effectively the required tasks.

ACTION: Non-concur. It is conceded that the recommended substitution, in a literal sense, should suffice. However, it is felt that it understates the requirement for operational readiness which must be present in the chemical staff sections. See also subparagraph d(8) above.

(18) <u>COMMENT</u>: (Page 9, para 4d(1), lines 2-3). "Delete 'a CBR operational readiness capability to' and substitute <u>sufficient personnel to perform the actions required of</u>. (See comment 6.)"

ACTION: Non-concur. See subparagraph d(17) above.

(19) COMMENT: (Page 9, para 4d(1)(d), all). "This is not a solution to the problem. A unit may request replacements only for authorized spaces. Augmentation spaces must be approved by the appropriate commander. It is recommended this paragraph be worded as follows--Obtaining authorization to augment the strength of the chemical staff section, as required, and requisitioning qualified personnel through normal replacement channels. (Accuracy).)"

ACTION: Concur. Recommended change in wording has been made in the study.

(20) COMMENT: (Page 10, pare 5a, all). "Delete and substitute: There is a requirement for providing the chemical sections of the commands under consideration with adequate numbers and types of personnel. While the required numbers may be determined only after extensive field testings the following strengths may be considered appropriate for field testing.

"(1) Infantry, Armored . . . (Conclusion must be based on field testing.)"

ACTION: Concur in part. It is agreed that the required numbers can best be determined only after extensive field testings, However,

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it is felt that the conclusion that there is a requirement for reorganizing the chemical sections is valid as stated; and further, that action to reorganize the chemical sections on an interim basis, at least, should be taken pending a more accurate determination of requirements by field tests.

(21) <u>COMMENT</u>: (Page 11, para 6c, a11). "This should be the first recommendation (paragraph 6a) and the other recommendations should be relettered accordingly. (Changes to TOE's should be made only after the proposal has been evaluated.)"

ACTION: Concur in part. Recommended change has been made in the study.

(22) <u>COMMENT</u>: (Page 11, para 6a, all). "Delete and substitute: That for the purpose of field testing of requirements for manning of chemical sections, type units listed below be authorized temporary augmentations to provide for strengths indicated. Based upon the results of field testing (paragraph 6a) action be initiated to revise the appropriate tables of organization and equipment.

"(1) Infantry, Armored, . . . (See comment 20.)"

ACTION: Non-concur. It is felt that sufficient evidence exists to warrant an immediate revision of strength authorizations for the chemical sections of the commands under consideration pending a more accurate determination by field testing. Therefore, the suggested substitution has not been made in the study.

(23) <u>COMMENT</u>: (Page 13, para la, lines 4-5). "Change to read:
. . . coupled with the <u>estimated</u> capabilities of the . . . (Accuracy. The intentions of the enemy are rarely known)."

ACTION: Non-concur. In this case there is no doubt of either the capabilities or stated intentions of the Soviet Union.

(24) COMMENT: (Page 13, pare 1s, line 6). "Delete 'capability." (Unnacessary.)"

ACTION: Concur. Recommended deletion has been made in

the study.

(25) COMMENT: (Page 13, para 1b, lines 2-3). "Delete 'provide a CRR operational readiness capability to these forces' and substitute materially strengthen the capability of the forces to deal with CRR situations. (Clarity.)"

ACTION: Non-concur. It is felt that the recommended substitution results in an inaccurate statement.

(26) COMMENT: (Page 13, para 2a, lines 4-7). "Change to read:
... warfare. The use of nuclear weapons with attendant radiological hore ds

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and of new and highly toxic chemical and biological agents will increase the responsibilities and tasks of the staff chemical officer. (Accuracy)."

ACTION: Non-concur. The possibility of the use of nuclear weapons and chemical and biological agents has already increased the duties and tasks of the Chemical Officer.

(27) <u>COMMENT</u>: (Page 19, para 2d(2)(a)1. "Change to read:

1. Recommending <u>EEI</u> to G2. (Approved terminology.)"

ACTION: Concur. Recommended change has been made in the study.

(28) <u>COMMENT</u>: (Page 19, para 2d(2)(a)2, all). "Delete and substitute -- Assists G2, as required, in the collection and evaluation of intelligence information pertaining to CBR warfare. (Accuracy. As written, this is a G2 activity.)"

ACTION: Concur. Recommended substitution has been made in the study, although the statement as written specifically states "for G2."

(29) COMMENT: (Page 19, para 2d(2)(a)3, all). "Delete, (See above comment.)"

ACTION: Concur in part. Statement has not been deleted; however, the qualifying phrase "through G2" which was, of course, implied, has been added.

(30) <u>COMMENT</u>: (Page 19, para 2d(2)(a)4). "Insert before 'Chemical Corps' <u>assigned or attached</u>. (Accuracy. Frequently technical intelligence personnel will be operating in an area and will not be subject to the supervision of the unit chemical officer. This is particularly true at division.)"

ACTION: Concur. Renommended insertion has been made in the study.

(31) COMMENT: (Page 19, para 2d(2)(a)5, line 1). "Add before festimating" assist G2 in. (Estimating enemy capabilities is a G2 activity)."

ACTION: Concur. Recommended addition has been made to

the study.

(32) COMMENT: (Page 20, para 2d(3)(a)14, line 2). "Delete "meeded." (Editorial.)"

ACTION: Concur. Recommended deletion has been made in

the study.

(33) COPPENT: (Page 22, para 2d(4)(c)3, all). "Delete. (Individual replacements are requisitioned by G1, units replacements and augmentation teams by G3.)"

ACTION: Non-concur in recommended deletion. Statement

has been clarified.

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(34) COMMENT: (Pages 28-30, para 21, all.) "This portion of the study requires more detailed treatment than is given here. The requirements for chemical staff personnel are not substantiated except in vague generalities. The impression is gained that because elements of the missile command may operate in different locations, chemical staff personnel must be likewise separated. The functions of a chemical officer in a missile command in support of an allied force will differ radically from those of a chemical officer in one of the other commands. He is not the force chemical officer with all attendant responsibilities and functions outlined for the other commands, but the missile command chemical officer. Before the validity of the conclusions and recommendations can be determined, the responsibilities, functions, and major activities of a missile command chemical officer must be developed. Such terms as "the over-all CBR effort of the command" require explanation and discussion."

ACTION: Non-concur. The subject is adequately covered in the study.

(35) <u>COMMENT</u>: (Page 56, Item 5, all). "Delete. (This reference has been rescinded.)"

ACTION: Concur. Recommended deletion has been made in the study.

(36) COPOGENT: (Page 56, Item 13). "Delete and substitute PM 161-31, July 1959, Staff Officers Field Manual, Nuclear Weapons Employment. (SECREI) (Current reference.)"

ACTION: Concur. Recommended substitution has been made in the study.

#### e. (U) US Army Infantry School:

CONCENT: "1. Since there are requirements for chemical staff personnel at battle group and battelion level, it is recommended that the statement of the problem in the subject study be revised to encompass only those levels of command delineated in the title of the study.

"2, USAIS concurs in the remainder of the study."

ACTION: Concur. Recommended revision has been made to the

f. (8) US Army Intelligence Center:

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". . . and concurs with the conclusions and recommendations of the study, except for the following comments:

(1) CONSENT: (Page 6, para 40(2) "Since TOCs are generally located at Main Command Posts, it is believed that one chemical staff section element, in most instances, will suffice for both the CP and TOC."

ACTION: Non-concur. The chemical element (the CBRE) in the TOC will be concerned with current tactical operations primarily. The over-all direction of the chemical staff section will be accomplished in the chemical staff section "beadquarters," which normally is expected to be in the main command poet. It is felt that the CBRE must be physically present.

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in the TOC. Whether or not both elements are present in the main command post is dependent on the SOP or policy of the command concerned.

(2) <u>COMMENT</u>: (Page 8, pars 4c(4), Table 1). "The need for larger chemical staff saction elements for Light and Medium Missile Commands over Divisions is questioned. It is believed that the TOE for the Division and the Missile Command chemical staff section elements should be similar."

ACTION: Non-concur. The strength authorizations for the missile commands' chemical staff sections proposed in the study are based primarily on the concept that the groups of a missile command may be widely separated. It is felt that each of the groups, to include the service and support group, must have, as a minimum, a GBRE capability.

(3) CONCENT: (Page 18, para 2d(1)(h)4a) "... be changed to read: Prepages target analysis and damage assessment predictions for all friendly nuclear bursts. It is further recommended that all subsequent references to bre-strike' and 'post-strike' be changed to read respectively 'target analysis' and 'damage assessment.' (Nomanclature for 'pre-strike' and 'post-strike' has been recently changed officially to 'target analysis' and 'damage assessment.)'\*

ACTION: Concur. Recommended changes have been made in the study.

(4) CONSENT: (Page 19, para 2d(2)(a)1). "... be charged to read: Recommending NEI to G2. (Nomenclature for 'GIP' has been recently changed officially to 'NEI.')"

ACTION: Concur. Recommended change has been made in the

(5) CONTENT: (Page 19, para 2d(2)(u)5). "... be changed to read: Estimating Enemy CRR capabilities based on information collected and material captured. (Estimating Enemy Capabilities as a whole is the responsibility of the G2.)"

ACTION: Concur. Recommended change has been made in the

(6) <u>COMMENT</u>: (Page 29, pars 21(2), lines 10-11). "Since one of the two field artillery groups will always be located near the service and support group, the need for a CNES of one officer and four enlisted men for the service and support group is questioned. The CNES of the field artillery group located near by should suffice."

ACTION: Non-concur. See coment at subpersprays f(2)

above.

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#### g. (U) Chief Signal Officer:

COMMENT: "1. Review and evaluation of the reference report indicates: that it is an excellent study affort; that no detailed compacts are necessary. Additionally, that although CMCD 58-7 project is of significant

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interest to the Signal Corps, this Phase I, Part A portion is only of collateral interest.

\*2. It is requested that information copies of this report as well as copies of other portions of CHICD 58-7 be furnished the following Signal Corps eddressees: CG, US Army Electronic Proving Ground, Pt. Huachuca, Ariz; Gomdt, US Army Signal School, Ft Monmouth, New Jersey, ATTM: Doctrine Office.\*

ACTION: Requested distribution will be made.

h. (U) United States Army, Europe:

COMMENT: "... The Combat Development Project Report inclosed with the above referenced letter was forwarded to Seventh US Army for review. The comments of Seventh US Army are contained in the preceding indorsement and in inclosure number 2.... This Headquarters concurs in the comments of Seventh US Army."

ACTION: Noted. The general and specific comments of Seventh US Army are quoted in following subparagraph.

- i. (S) Seventh United States Army:
  - (1) (U) General Comments.
- (a) COMMENT 1: "The attached study has been reviewed by the Chemical Section, this Headquarters, as requested. Fundamentally, it is considered to be well prepared and timely. Detailed comments concerning cortain specific portions of the study are attached hereto as Inclosure #2."

#### ACTION: Noted.

(b) <u>COMMENT 2</u>: "Fara 2b of the study touches lightly upon one phase of the problem which has been emphasized by this headquarters in command correspondence on a number of occasions. The attainment of an adequate readiness posture for CBB warfare depends upon very long lead times in obtaining essential material and trained personnel, the personnel shortage being the most critical and requiring the greatest time for correction. A satisfactory solution to this problem can only be reached by TOE provision of required personnel and the concurrent initiation of appropriate training and replacement programs. Anything short of such action will provide only interim, apposadic, partial solutions which will fail to attain the desired objectives."

ACTION: Concur. The "assumption" at para 2b has been

designated a "fact bearing on the problem."

(c) <u>CONSTIT</u>: "Although the attached study deals only with Chemical personnel requirements at division headquarters and higher in the field army, it is believed appropriate to reiterate the Seventh Army position which calls for the TOE integration of Chemical personnel at all levels from company/battery up. The increased staffing requiremented by the study cannot result in an adequate CBR readiness posture without a substantial, reliable base below it."

ACTION: Concur. This problem has been examined

separately and published in Phase I, Part C, to CHICD 38-7.

(2) (8) Specific Comments.

(a) (U) CONSINT 1: (Page 4, para 2b). "This resumption of the staff study deserves for greater attention and consideration than is provided in the study. Lead time in personnel and naterial procurement is a

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tremendously important factor and in connection with action to implement the recommendations of this study is probably a controlling factor. Trained CBR personnel or chemical strif specialists will not automatically appear upon the announcement that spaces have been provided for them. Training the required personnel from individuals on hand in TOEs will pose a tajor problem. Providing the necessary replacement pursonnel will be seen more difficult and require well planned and programmed training and replacement procedures within CONUS."

ACTION: Concur. See action courses in subpersonaph

1(1)(b) above.

(b) (b) (c) COMMENT 1: (Page 4, para 3b). "TO 101-1 is not considered sufficient nor adequate as regards fallout procedures. Seventh Army Cir 52-4 is considered nore satisfactory for a field army."

ACTION: Now-concur. TC 101-1 reflects current

Department of Army documine.

(c) (0) <u>COMMENT 3</u>: (Page 4, page 3c). "Including of the Chemical Company, Combat Support, is not believed partitions. Other types of Chamical units also provide support to the combat arms."

ACTION: Concur. This reference to the Chemical Company,

Combat Support, has been deleted from the study.

(d) (0) COMMENT 4: (Pages 6-7, para 4c(2)(e)). "Reference is made to comment in para 1 above (subpara (2)(e)) above. In addition, Seventh Army has constatently held that the requirements for trained GBK paraonnel extends down to company/battery level. These personnel too must be provided by TOE, trained in sufficient numbers for initial assignment and programmed for replacement by trained personnel. This training and replacement program will be extracely domanding on current Chemical staff specialist training facilities."

ACTION: Concur. See subparagraph 1(1)(c) above.

(e) (0) COMMENT 5: (Pages 6-7, para 4c(2)(a)). "This so-patied CAR team must be considered more than a ream and some as part of a section. It is obvious that one efficer and four KM cannot operate a CAR section on a continuous basis for any extended period. It is just as true that two or three independent CAR teams is not the answer. Consequently, the requirement is for what Seventh Army calls a CAROC - a CAR operations center. Recognizing full well that full implementation of Toke to not always possible during peacetime, nevertheless it is strongly believed that Toke should provide for the full wartime personnal complement. Line deletions may reduce Toke to peacetime strengths, but when a full operational status in effect it should not be by augmentation of the TOE but by filling the ToE. For training and sevenent surposes the "IA" team contept is satisfactory, Operationally though, it should be a part of the CAROC and no longer a separate entity."

#### ACTION: Noted.

(f) (U) COMENT 6: (Page 7, para 4c(2)(b)). "Within Seventh Army there is a definite, well recognized requirement for a CEROC of capability in the Chemical section of the Army Rear CP. This requirement is used by cross-training of logistical paraonnel in CROC procedures. Although an increase in the number of Chemical personnel at year would be required paraon

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emergency conditions, it is felt that having personnel cross-trained in CEROC procedures and supply operations would be wholly adequate and less expensive of personnel."

ACTION: The requirement for a CBRE capability in Army Rear has been recognised in the study. The study has also attempted to demonstrate that cross-training of the personnel in the chemical sections is mandatory in view of the austerity in proposed increases to the chemical sections of the commands under consideration.

(g) (U) COMMENT 7: (Page 7, page 4c(3)). "Current authorizations within Seventh Army for chemical personnel at the staff levels under consideration are completely imadequate for field operations. For any type of exercise over 48 hours long these sections must be augmented with both officer and enlisted personnel. In many instances it has been necessary to utilize non-CmlC personnel because Chemical units in Seventh Army cannot satisfy their own plus senior headquarters requirements. All assigned personnel in Chemical sections within Seventh Army are required to be cross trained in Chemical sections."

#### ACTION: Noted.

(h) (U) COMMENT 8: (Page 8, Table 1). "Current manning levels and troop basis authorizations do not permit TOE staffing of the Escenth Army Chamical Section. As a consequence, it is now authorized 5 officers and 14 EM. There is no question but what the current TOE is insdequate for a modern war and the proposed staffing far more realistic from an operational point of view. The same is true of the proposed staffing at division a corps levels. Within Seventh Army, the chemical sections in both US Corps are now authorized four officers and eix EM. Whether or not the Army chemical section will require the number of personnel proposed is not easily determined because of a dearth of operational experience in a true CBR environment. It is believed, however, that one officer space could be aved by consolidating an operations officer and the Endiclogical Defense Engineer should be in the operations element of the chemical section and qualified as more than a 57330."

ACTIVE: Non-consur in the consolidation of an operations officer space and The Radiological Defense Regimeer officer space. It is felt that increases proposed for the chemical sections are adequately justified in the study.

(i) (U) CONSTANT 9: (Page 9, para 4d(i)(d)). "Obtaining trained personnel through normal replacement channels is considered for superior to levying units or augmenting from other sections. This is just as true for initial staffing as it is for replacement; as adequate staffing, training and replacement program is a must."

#### ACTION: Noted.

(j) (U) COMENT 10: (Pages 9-10, para 4d(1)(d)1). "It is believed that too much emphasis to placed on these 5 "IA" teams at the expense of the CR operations as a whole. "It is felt that the operational functions of the Chemical section of the headquarters should be consolidated.

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in one CBROC rather than being divided into a so-called CBR section and a command post element. The chamical functions at Main CP will be performed in a CBROC which consists of the CBROC operational personnel and the planning and administrative personnel. By virtue of cross training in CBROC as well as other duties normally performed at Main CP a greater flexibility is possible. In short, every man in the Main CP must be competent to work in CBROC. The "IA" teams should marely fill line delations in the TOE rather than augment."

-1.1.

ACTION: The CRRE element of the chamical section, as discussed in the study, replaces the radiological center and is located in the TOC of the command concerned. This conforms to USCONARC guidance. In view of the other elements comprising the TOC and its mission, it is considered necessary to separate the current tautical activities accomplished by the CRRE from the administrative and planning functions performed in the chemical section "headquarters," or command post element.

(k) (U) COMMENT 11: (Page 10: para 4d(2)). "Commente in paras 1, 4 and 5 above (subparas (e), (d), and (h) above) are pertinent here also. Even though this problem may be the subject of a separate study, it is inevitably tied into this one as well. Until an adequate training and replacement program is in being it will be impossible to satisfy the requirements indicated in this study or the requirement for trained CAR personnel below division headquatures level."

#### ACTION: Noted.

(1) (U) COMMENT 12: (Page 11, para 52). "The validity of portions of conclusions a and b have already been substantially preven within Seventh Army. Purerous CPMs and PTMs over the last two years have demonstrated the requirement for a fully capable, across-the-board CBR operations center to handle all problems connected with defense against CBR basards and the exploitation of CBR weapons effects. It has likewise been conclusively demonstrated that Army, Corps, and Division Chantes sections are currently under staffed; sugmentation is essential for 24 hour operation now."

#### ACTION: Noted.

(a) (0) <u>COMENT 13</u>: (Page 13, Appendix 13 to Ansex A). "It is believed essential that the staff chanical officer at every estalent be comparable in grade to mis comment on staff. Recommend that the missile command chanical officer be a Li Col."

ACTION: Consur. Bacomunded thange has been made

in the study.

(a) (b) COSCINT 10 (Page 60, Mibliography): "Although the bibliography makes note of a Seventh Army letter 32 29 Aug 58, concerned with personnel requirements (Item 56), it is felt that consideration of and inclusion of the following Seventh Army Command Letters would assist in strengthening the study."

"A. (9) Ltr, AETCG 470/7, Mg Seventh UK Army, subject: "Essential Military Requirements for Effective CAR Defense Pesture Within Seventh United States Army (6)." darei 29 November 1957.

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"b. 45) Ltr, AETCS 250/U5.4, Rq Seventh US Army, subject: Combat Requirements for Massive Offensive CHENICAL, FIAME, and HE Optimum Frag Head Rocket Vespons System (5), dated 23 January 1958.

"c. (U) Ltr, AETCC 250/17, He Seventh US Army, subject: 'Personnel Requirements for Effective CBR Combat Posture in Seventh US Army (U), dated 30 March 1959.

"d. (U) Ltr, AETCC 250/17, Hq Seventh US Army, subject: "Command Guidance for Coping with Hultiple Mass Disaster Strikes," dated 8 August 1959.

"e. (U) Ltr, AETCC 250/U5.3, Hq Seventh US Army, subject: 'Requirement for a Refined Fallout Frediction Nothod Useful to Tactical Commanders (U), dated 2 December 1958.

"f. (U) Ltr, ARTKCH 265/76, Hq 4th Armored Division, subject: "Augmentation of Division Chemical Section (U)," dated 9 April 1959.

"S. (U) Ltr, AETGCG 265/27, Hq 24th Infantry Division, subject: "CBR Personnel for the Infantry Division," dated 10 October 1959.

"h. (U) Ltr, ARTCC 250/17, Hq Seventh US Army, subject: "Requirement for Hobile Power-driven Deconteminating Apparatus (U)," dated 11 March 1959."

ACTION: Concur. Those recommended references available have been added to the bibliography of the study.

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